

<u>atriadesigns.ca</u> 604-428-1818 <u>sales@atriadesigns.ca</u>



SUN PROTECTION





OUR MISSION

Creating healthy spaces



Paul Renso

"Renson® specialises in ventilation, sun protection and outdoor. With experience dating back to 1909, and an integrated team of over 1200 employees, we develop systems and solutions which provide consumers with a healthy and comfortable

living and working environment, also taking into account energy efficiency and the use of renewable energy. We develop innovative products and systems, and offer total solutions to make every house into a healthy and comfortable home.

"We appreciate the aesthetic values of every building, allowing our sun protection and ventilation systems to be incorporated invisibly. Our outdoor products and aluminium blades for covering façades provide clear accents, offering added value to the architecture. Inside, we ensure that doors are integrated invisibly with no conspicuous frames or visible joints."

Discover how Renson® products can optimise the comfort experience while guaranteeing a contemporary design.

"We develop innovative products and systems allowing for aesthetic integration in every building."



CONTENTS

PRODUCT SELECTOR	p. 6	Topfix® Max	p. 182
		Topfix® Max	р. 186
INTRODUCTION		Freestanding	р. 190
Why sun protection?	p. 11	Topfix® Max F	р. 190
Enjoy all seasons	p. 12	Vegascreen®	p. 194
Always comfortable	p. 15	Vegascreen®	p. 194
Unique design	p. 17		
		ABRICS	
PRODUCTS		How do you choose a fabric?	р. 198
Vertical sun protection	р. 18	Fabric overview	p. 208
Fixscreen®	p. 20	Fibreglass fabrics	p. 211
Fixscreen® 100	p. 22	Polyester fabric Soltis	p. 217
Fixscreen® 100 Solar	p. 42	Insectmesh	p. 222
Fixscreen® 100 Slim	p. 48	Acrylic fabric Orchestra (Max)	p. 223
Fixscreen® 150	p. 60	Crystal screen	p. 224
Freestanding	p. 90	Personalized printing	p. 225
Fixscreen® 100 Slim F	p. 92		
Fixscreen® 150 F	p. 100	GENERAL	
Acoustic (and ventilation)	p. 112	Dimensions, cable feed and confection side	p. 227
Fixscreen® Mono AK EVO	p. 114	Renson® colours	p. 230
Fixvent® Mono AK ^{EVO}	p. 120	Automatisation	p. 232
Fixscreen® Minimal	p. 132	Motors	p. 233
Fixscreen® Minimal	р. 136	Sensors	p. 235
Freestanding	p. 140	Control	p. 237
Fixscreen® Minimal F	p. 140	Selector	p. 239
Panovista®	p. 144	Accessories	p. 243
Panovista®	p. 148	Standards	p. 244
Panovista® Max	p. 152	Warranty	p. 249
Slidefix [®]	p. 156	Maintenance	p. 250
Slidefix®	p. 156	Why Renson®?	p. 251
		Renson® Academy	p. 253
Horizontal sun protection	p. 168	Renson® Pre- & Aftersales	p. 253
Topfix [®]	p. 170		
Topfix®	p. 174	LEGEND	p. 255
Topfix® VMS	p. 178		

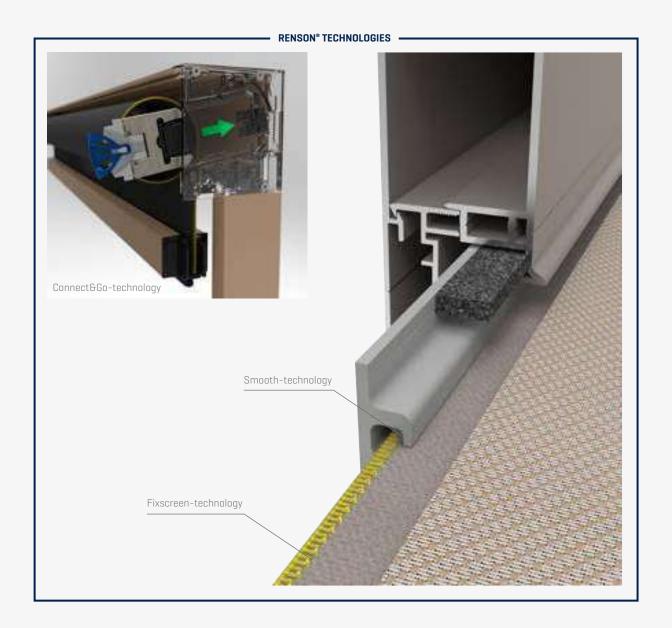
FIXSCREEN®, KEEPING HOMES COOL SINCE 2005!

2005: With Fixscreen, Renson® launched the first windproof external sun protection screen that could handle wind speeds of up to 120 km/h. So, how does it work? The screen zips tight in two side channels while being lowered, meaning flapping and torn screen fabric are a thing of the past. A genuine milestone, as well as the first step toward a remarkable success story. There's a reason why innovation runs through Renson®'s DNA: soon enough, one new Fixscreen feature started following another. From Topfix to Panovista Max to Slidefix: the company now offers suitable sun protection screens for every type of window.



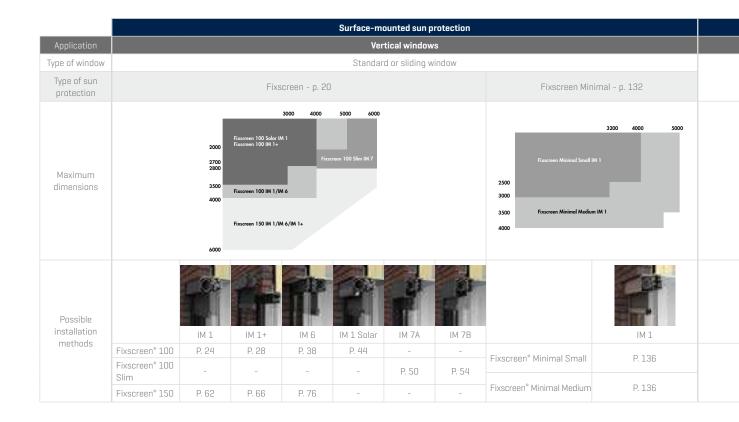
Skylights, glass-on-glass corner windows and sliding windows can all now be fitted with high-quality, design-conscious and made-to-measure sun protection screens; windproof as usual, but each fitted with [now standardised] Fixscreen and Smooth-technology [which now allows for wind speeds up to 130 km/h!] and Connect&Go-technology for effortless installation of the fabric tube. It's thanks to these features that Renson® can offer unrivalled warranties, not just on the windproof aspect, but also on technological elements. An overview:

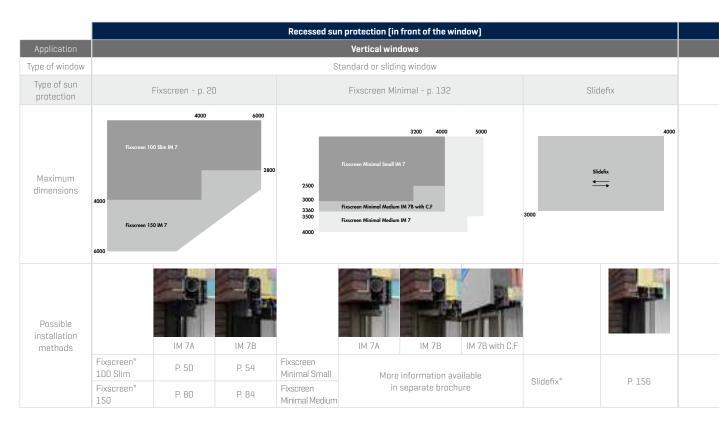




The fact that we've got to the point where we can celebrate Fixscreen's 15th birthday is not just a fantastic achievement for Renson®, but also for our partners and Ambassadors, who all contributed to this success story. This is certainly a good time to look back at 2005, but also to get excited about what the future holds, as Fixscreen still has plenty to offer! The arrival of Fixscreen Minimal in 2020 marks the next major step for Renson® in the continuous development of its renowned sun protection screen system by pushing the boundaries when it comes to minimalist design. Every last detail of the system was reimagined: from the screen box to the side channels, fabric tube, dimensions and screen tension. Even our existing Connect&Go-technology was updated to make it more robust than ever before. As such, a suitable, durable and high-quality solution is now available for curtain walls and retrofitting on existing 'minimal windows' too. With a retrofit and new-build application for minimalist windows, as well as a solution for curtain walls, Renson offers an innovative, durable and high-quality all-round range with Fixscreen Minimal. We cannot wait to see what the next 15-years of Fixscreen sun protection will bring!

HOW DO I CHOOSE THE RIGHT SOLUTION? SUN PROTECTION





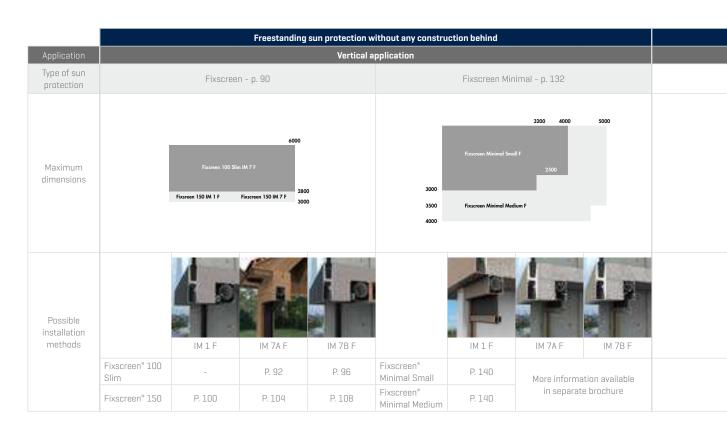
Attention: Maximum dimensions depending on fabric type

		Surface-mou	nted sun protection			
Vertical windows				Horizontal windows		
Corner window		Curtain wall		Conservatories, skylights, roof windows or Velux Modular Skylight		
4000 Panovista 2800	4000	Fixscreen Mi Curtain 4000	3600 nimal Medium Well 50	3000	4000 45i opfix (VMS) Vegascreen	00 5000 4000 Topfix Max
	IM 7A		IM 7A		Windproof	Not windproof
	Fixscreen® Minimal		I More information	Topfix® (VMS)	P. 174	-
Panovista®	Panovista® P. 148 Medium	Medium	available in separate	Topfix® Max	P. 186	-
		Curtain Wall 50	brochure	Vegascreen®	-	P. 194

Recessed sun protection (in front of the window)					
		Vertical windows			
Panovis	Corner ta (Max)	window Slid	ебіх	Curtain wall	
2800 Panovita Max (max 30 m²)	4000 6000	4000 Slidefix	3000	Fixscreen Mini Curtain \	3600 imol Medium Voll 50
	IM 7A				IM 7A
Panovista®	P. 148	Slidefix®	P. 156	Fixscreen® Minimal Medium	More information available in separate
Panovista® Max	P. 152	Olidolia	1.100	Curtain Wall 50	brochure

HOW DO I CHOOSE THE RIGHT SOLUTION? SUN PROTECTION





Attention: Maximum dimensions depending on fabric type

Recessed sun protection (on top of the window)			
Vertical windows			
Acoustic	& ventilation		
	4000		
Fixven Fixven	t Mono AK ^{ρο} Mono UT ^{ρο}		
	3000		
	O IM 4		
Fixscreen® Mono AK ^{EVO}	P. 114		
Fixscreen® Mono UT EVO	P. 120		

Freestanding sun protecti	on without any construction behind
Horizo	ntal application
Toplix Ma:	5000 6000
5000	
6000	
Topfix® Max F	P. 190



WHY **SUN PROTECTION?**

As trendsetter and pioneer, Renson® is a world player in sun protection. Thanks to exhaustive testing and continuous innovation, the design of our products is optimized time and time again, durability is improved and comfort is raised to a higher level.

A pleasant indoor comfort

Outside sun protection prevents the sunrays from reaching the glass, which keeps the indoor temperature under control. In warmer periods it stays up to 10°C cooler indoors, and this without energy-consuming air-conditioning. But it does not end there. For example, sun protection also prevents distracting reflections on monitors/displays and discolouration of furniture. At the same time, visibility to the outside is maintained and privacy guaranteed. Building standards are becoming stricter all the time. Contemporary homes are so well insulated that once the summer heat is inside, it is very hard to get it out again.

Live healthier

More daylight and an outside view ensure increased productivity and concentration and a good feeling, in short, healthier living. In combination with ventilation and/or acoustic insulation, sun protection provides an even better indoor comfort.

User-friendly and flexible

Renson sun protection fits every possible installation method. Recessed or surface-mounted depending on the customer's wishes. Furthermore, the systems are very easy to operate with pressure switches, hand transmitters, applications or even fully automated with sensors.

Stylish design

Sun protection blend in perfectly with the current trend of minimalism, trendy living and remarkable architecture. But also fit in smoothly with the traditional architectural styles. Invisibly integrated or subtly incorporated, executed in unique colours or with elegantly designed boxes, sun protection always gives a contemporary look to the home.

Big, bigger, biggest

Large glass surfaces are currently 'trendy'. Logical, because large glass windows allow for more sunlight to enter. Renson responds to this and offers sun protection of up to 22 m² for vertical glass surfaces and no less than 30 m² in case of horizontal glass surfaces.

Save on energy

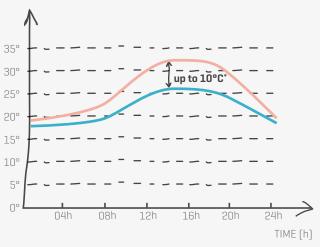
Dynamic sun protection ensures that the indoor temperature remains under control and therefore comfortable during the summer. In winter, you can use the solar gains to heat up your home for free. Thanks to dynamic sun protection, you save on heating costs and your home is heated for free in a pleasant and natural way, while you save on cooling costs during the

ENJOY ALL SEASONS

Everyone wants as much natural sunlight in their home as possible, while keeping the indoor comfort under control. Sun protection provides more comfort and less energy consumption in warm summer as well as in cold winter months. Moreover, sun protection also positively affect your power consumption.

Control the summer heat

Excessive sunlight can cause overheating indoors, distracting reflections on screens and discolouration of furniture and the interior. All of this can be remedied with sun protection and Western-European homes can be up to 10°C cooler relative to outside.

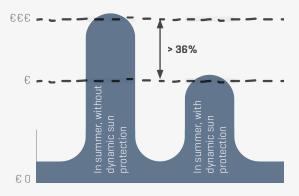


Indoor temperature
In summer,
without sun protection

Indoor temperature In summer, with sun protection

Save on cooling and heating costs

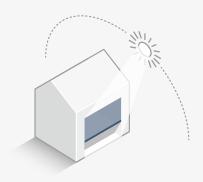
The fact that the sun can still enter during winter has a positive impact on the energy bill. There is no need to switch on artificial and often energy-consuming lighting in the pleasant and bright living areas. During the winter months, the low-lying sun moreover ensures a pleasant solar warmth, enabling the heating system to consume less energy.



ESSO 2014 Study

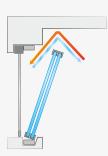
"Dynamic shading solutions for energy efficient buildings". Dynamic sun protection leads to a decrease of more than 36% in costs for cooling [all types of glazing & climate conditions in Europe]. The highest savings are achieved in case of south-west facing façades, effectively up to 65-70%.

SUMMER



During the day

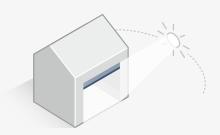
During the day, you keep the sun protection down to keep the indoor temperature within limits. This way, you can also avoid distracting reflections, furniture discolouration and no active cooling is needed.

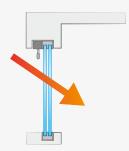


At night

Lower the sun protection fabric at night with the windows open, so that the home can cool down sufficiently thanks to the cooler nights. This allows you to start your day in a pleasantly cool home. Moreover, the insects are still kept outside.

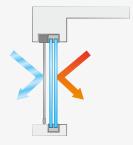
WINTER





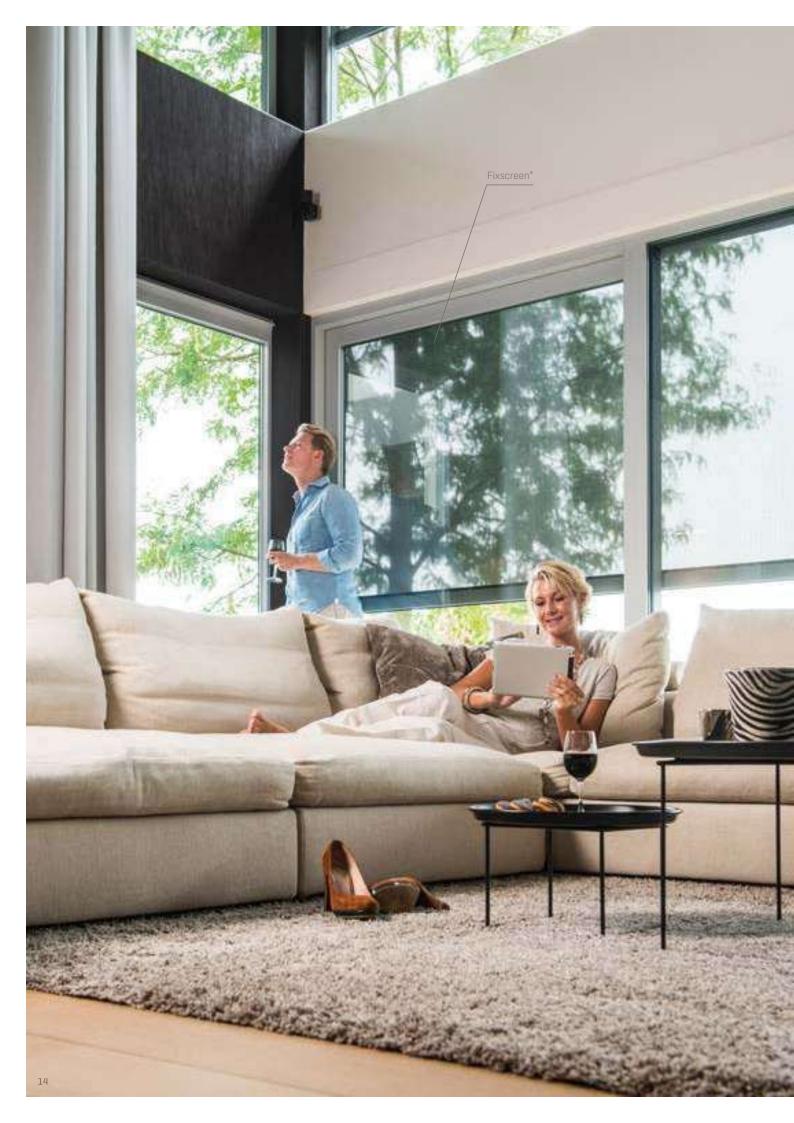
During the day

During the day, daylight enters through the windows as much as possible. In doing so, the rooms are heated in a pleasant and energy-saving way.



At night

Lower the sun protection at night so that the air between the sun protection and the window acts as an insulator. This way, it remains warm inside and you can get up in the morning in a pleasantly warm home.



ALWAYS COMFORTABLE

VISUAL & AESTHETIC COMFORT

Natural daylight is essential to human beings. It is crucial for our well-being and health. This also results in increased productivity in office buildings and improved psychological and physical health. By providing a sufficient number of windows we try to ensure that as much natural light as possible shines into our homes.

However, when the intensity is too high, especially in summer, the abundance of natural light can seriously disrupt the indoor comfort. Sun protection ensures that we can continue enjoying natural sunlight and a perfect view to the outside, without disturbing reflections on our multimedia.



Nowadays, people spend almost 90% per day indoors. 50 years ago, people stayed outdoors for almost 90% of the day!

THERMAL COMFORT & ENERGY-SAVING SOLUTION

Next to visual comfort, thermal comfort is one of the top arguments to justify the choice for using dynamic sun protection as an energy-saving solution.

In combination with the window, sun protection offers an additional insulating feature. It avoids overheating, which, in summer, can result in an enormous energy consumption gain, as active cooling is not required. It also offers the opportunity of enjoying solar gains in winter and in doing so, save on heating costs.

Lighting costs can even be reduced by making maximum use of natural daylight.

Sun protection is more than a product. A high-performance, dynamic sun protection solution is a concept that manages both sun protection and daylight. Therefore, architects and builders should integrate this as a standard in their design, both for new buildings and for renovation. This will also be the future standard for (re)building: from 2021, all new buildings must comply to the near-energy neutral (nZEB) principles.

The greatest energy benefit is obtained with dynamic and automated sun protection.

Various studies have also proven the added value of dynamic sun protection.

• ESCORP EU-25 study (European study):

If roller shutters, outdoor and indoor sun protection are installed on at least half of the buildings, it yields almost 10% saving on energy consumption in buildings.

• TU Delft: TNO 2015 R10396 (Dutch study):

Savings on heating energy by means of thermal insulation of sun protection devices. The calculated savings on heating energy can be up to 17% for the reference town house and up to 29% for the reference apartment.

• ESSO 2014 Study (European study):

"Dynamic shading solutions for energy efficient buildings". Dynamic sun protection leads to a decrease of more than 36% in the costs for cooling [all types of glazing & climate conditions in Europe). The highest savings are achievable in case of south-west facing façades, namely, up to 65 - 70%.



UNIQUE DESIGN

Renson® cares for design. With an extensive choice of colours for both fabric and aluminium profiles, a discrete integration or an architectural accent can be realised.

IN PERFECT HARMONY WITH YOUR HOME

The box, side quiding channels, bottom rail and the fabric determine the look of your sun protection. These are made of aluminium profiles and are available in all Renson standard colours. This ensures perfect integration with your exterior carpentry and façade. Align the colour of your sun protection with the style of your façade. Moreover, you enjoy most of your glass surface because, with most screens, the bottom bar disappears completely into the box.

A VERSATILE SOLUTION

Sun protection are possible for a window surface of up to 22 m² for vertical windows. The windproof Fixscreen-technology ensures that the fabric is always tight. Thanks to the many possible installation methods, every building can be fitted with sun protection. You only need to take into account a maximum height or width of 6000 mm. The maximum surface area for horizontal sun protection goes up to 30 m².

STYLISH FINISH

All parts consist of discrete extruded aluminium. The tightness and uniform look of the fabric is thus ensured. This ensures the sleek and uniform look of your screen.

VERTICAL WINDPROOF SUN PROTECTION

Vertical sun protection directly incoming light, in case of standard windows, corner and sliding windows, glass-on-glass windows, and also for freestanding applications. The revolutionary Fixscreen-technology guarantees an extremely windproof and insectproof fabric that can also handle very large surfaces up to 22 m² in case of Fixscreen, or even a total maximum surface of 30 m² in case of Panovista Max. Windproof vertical sun protection are ideal for new buildings as well as renovation.





Fixscreen® (p. 20) - windproof sun protection for standard windows



Fixscreen® Minimal (p. 132) - discreet sun protection with a minimal impact on architecture



Fixscreen $^{\circ}$ Mono AK $^{\text{EVO}}$ (p. 114) – windproof sun protection with acoustic comfort



Fixvent Mono AK $^{\text{EVO}}$ (p. 120) – windproof sun protection, acoustics and ventilation in one



Panovista® (Max) (p. 144) – sun protection for angle solutions



Slidefix® (p. 156) – windproof sun protection for sliding windows

The stylish design, the unprecedented wind resistance and wide range of sun protection fabrics make Fixscreen a technological innovation, both in terms of comfort, ease of use and aesthetics. The Fixscreen can be applied in private housing, office buildings or project construction. Moreover, thanks to the unique Fixscreen-technology, Fixscreen guarantees a tight screen in any weather condition.





5. QUICK, SAFE INSTALLATION AND **DISMANTLING OF FABRIC SET**

Thanks to Connect&Go-technology.

6. RECESSED FABRIC TUBE

Manufactured from galvanized steel and fitted with a unique recessed fabric groove to limit compression of the fabric strap.



7. NEW DEMOUNTABLE CLICKING **PROFILE**

Limits horizontal lines and facilitates easy (de)mounting of the fabric roller in case of fabric replacement. (For Fixscreen 100 IM1 & 6, Fixscreen 100 Slim IM7 (F) and Fixscreen Minimal)



8. OPEN SIDE GUIDING CHANNEL **CHANNEL S IS AVAILABLE**

For Fixscreen 100 et Fixscreen 150 (F) an open side quiding channel S is available. This side guiding channel has an extra channel to conceal the cable.



9. SIDE GUIDING CHANNEL CONSISTING OF 3 PARTS AND U-PROFILE

For Fixscreen 100 Slim (F) and Fixscreen 150 IM7 [F], Panovista [Max], it is possible to choose a deep side guiding channel D. This side guiding channel consists of 3 parts and has a U-profile, which allows for easy disassembly of the screen set; without complete disassembly of the side quiding channel, without drilling or channelling, which guarantees water and wind proofing







Fixscreen® 100 / VERTICAL SUN PROTECTION

Installation method 1 (IM 1): surface-mounted, in front of the window, with fully finished box













Softline design

- Compact box
- Discrete and aesthetic integration
- Fabric tube removable from the outside





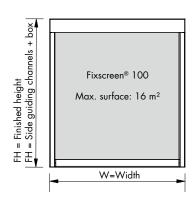


TECHNICAL DATA

Design				
Box size (HxD)		100 x 100 mm		
Box extension	(width left and/or right)	500 mm		
Square		✓		
Softline		✓		
Bottom bar ret	ractable	-		
Recessed fabri	c tube	✓		
Wind resistant	ce			
Wind class EN13561:2004		3		
Guaranteed wind resistance		Up to 130 km/h in closed position		
Application				
New buildings		✓		
Renovation		✓		
Residential		✓		
Non-residentia	I	✓		
Control				
	Detecto Renson motor Safety First	✓		
Motorized	Somfy mechanical motor	✓		
	Somfy, RTS radio-controlled motor	✓		
	Somfy, IO radio-controlled motor	✓		

DIMENSIONS

Motorized operation	Applicable fabrics	Dimensio	ns	
		Min. width	850 mm	
		Min. height	300 mm	
	Fibreglass fabrics	Max. width	5000 mm	4000 mm
		Max. height	2000 mm	4000 mm
		Max. surface	10 m²	16 m²
		Min. width	850 mm	
	Polyester fabric Soltis Horizon	Max. width	4000 mm	3000 mm
Single screen	86 / Soltis Perform 92	Min. height	300 mm	
	Tuffscreen mosquito mesh	Max. height	2700 mm	3500 mm
		Max. surface	10,8 m²	10,5 m²
		Min. width	1000 mm	
	Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Max. width	4000 mm	
		Min. height	300 mm	
		Max. height	2800 mm	
		Max. surface	11,2 m²	
		Min. width	1590 mm	
	Same as 'Single screen' 2-part [1 motor]	Max. width	6000 mm (Max. section width 4000 mm)	
		Min. height	300 mm	
		Max. height	2700 mm	
		Max. total surface	12 m²	
Coupled screen		Min. width	1700 mm	
	Same as 'Single screen'	Max. width	6000 mm (Max. section width 4000 mm)	
	2-part (2 motors)	Min. height	300 mm	
		Max. height	4000 mm	
		Max. total surface	24 m² (1 part with max. surface 16 m²)	

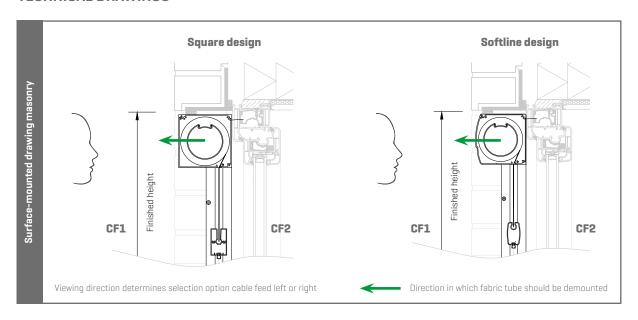


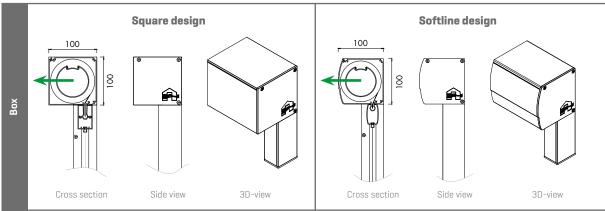
• Detecto Renson motor Safety First: always coupled with 2 motors

DURABILITY

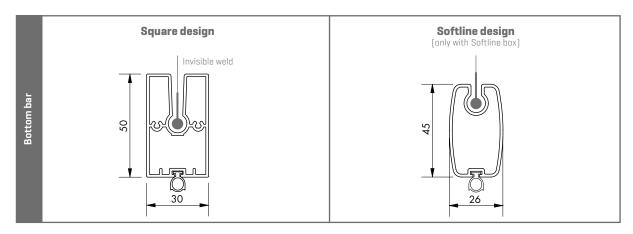
Technology		
Fixscreen-technology	✓	
Smooth-technology	✓	
Connect&Go-technology	✓	
Certificates		
Declaration of Performance (DoP)	DOP-2015SC00002	
Wind tunnel test report	N°113-25809	
Durability test report	WTCB N°651 XE823 CAR4139	
Warranty		
10-year warranty on coating of aluminium profiles	✓	
7-year warranty on Fixscreen-technology	✓	
7-year warranty on Detecto Renson motor Safety First	✓	
5-year warranty for electronic controls (motor & automation)	✓	
5-year product warranty	✓	
5-year warranty on fabric collection	✓	
5-year warranty on gloss level	✓	

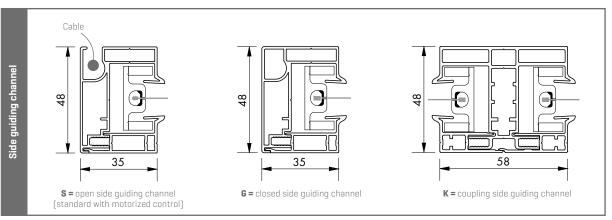
Installation method 1 (IM 1): surface-mounted, in front of the window, with fully finished box

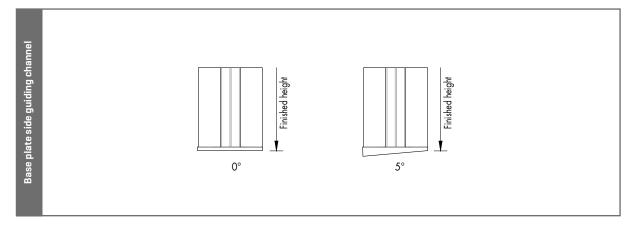


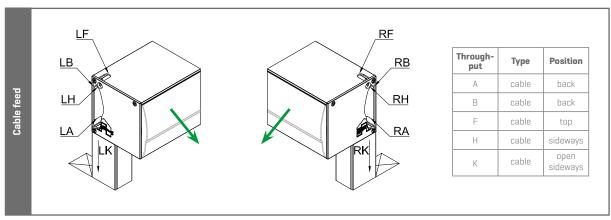


TECHNICAL DRAWINGS









Viewing direction determines selection option cable feed left or right Position window



Direction in which fabric tube should be demounted

Installation method 1+ (IM 1+): surface-mounted, in front of the window, on mounting bases with fully finished box











Square design



Softline design

- Suitable for curtain wall façades
- Discrete and aesthetic integration
- Fabric tube removable from the outside



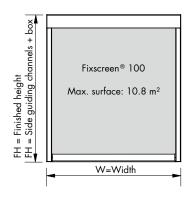


TECHNICAL DATA

Design					
Box size (HxD)		100 x 100 mm			
Box extension (w	idth left and/or right)	500 mm			
Square		✓			
Softline		✓			
Bottom bar retra	ctable	-			
Recessed fabric	tube	✓			
Wind resistance	Wind resistance				
Wind class EN13	561:2004	3			
Guaranteed wind	resistance	Up to 80 km/h in closed position			
Application					
New buildings		✓			
Renovation		✓			
Residential		✓			
Non-residential		✓			
Control					
	Detecto Renson motor Safety First	✓			
	Somfy mechanical motor	✓			
Motorized	Somfy, RTS radio-controlled motor	✓			
	Somfy, IO radio-controlled motor	✓			

DIMENSIONS

Motorized operation	Applicable fabrics	Dimensions	
Fibreglass fabrics Single screen Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. width	795 mm	
	Polyester fabric Soltis Horizon	Max. width	4000 mm
		Min. height	300 mm
		Max. height	3500 mm
		Max. surface	10,8 m²
Linkable		Required intermedia mm per 1000 mm v	ate size (expansion): 1 vidth



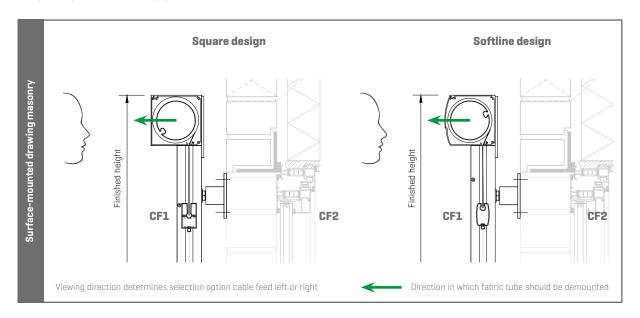
Note:

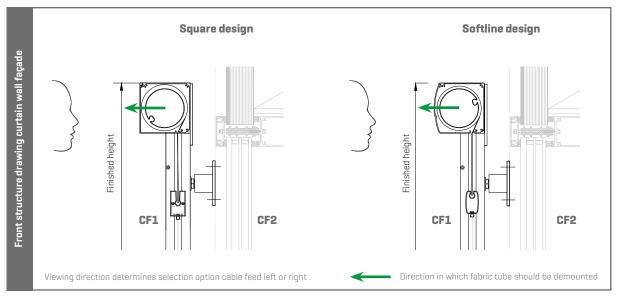
• Coupling is not possible

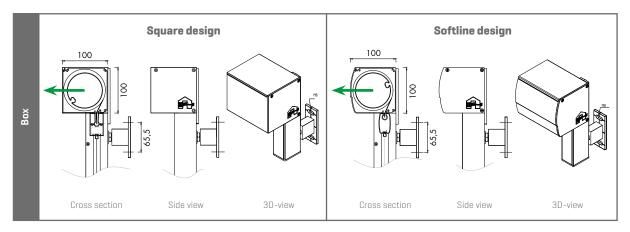
DURABILITY

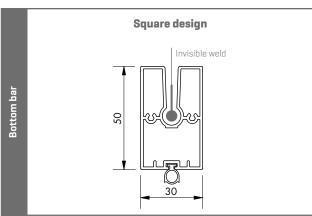
Technology		
Fixscreen-technology	✓	
Smooth-technology	✓	
Connect&Go-technology	✓	
Certificates		
Declaration of Performance (DoP)	DOP-2015SC00002	
Wind tunnel test report	N°114.31926	
Durability test report	WTCB N°651 XE823 CAR4139	
Warranty		
10-year warranty on coating of aluminium profiles	✓	
7-year warranty on Fixscreen-technology	✓	
7-year warranty on Detecto Renson motor Safety First	✓	
5-year warranty for electronic controls [motor & automation]	✓	
5-year product warranty	✓	
5-year warranty on fabric collection	✓	
5-year warranty on gloss level	✓	

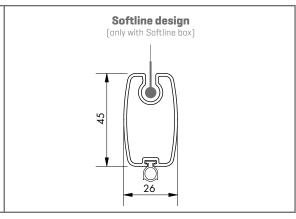
Installation method 1+ (IM 1+): surface-mounted, in front of the window, on mounting feet, with fully finished box

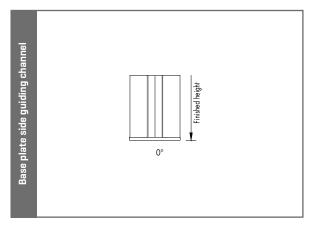


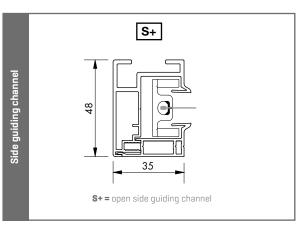


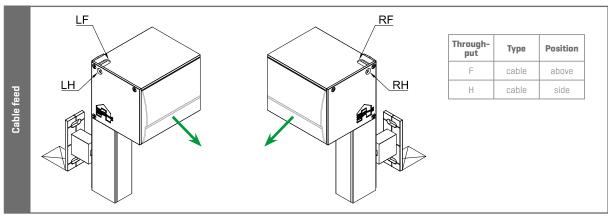








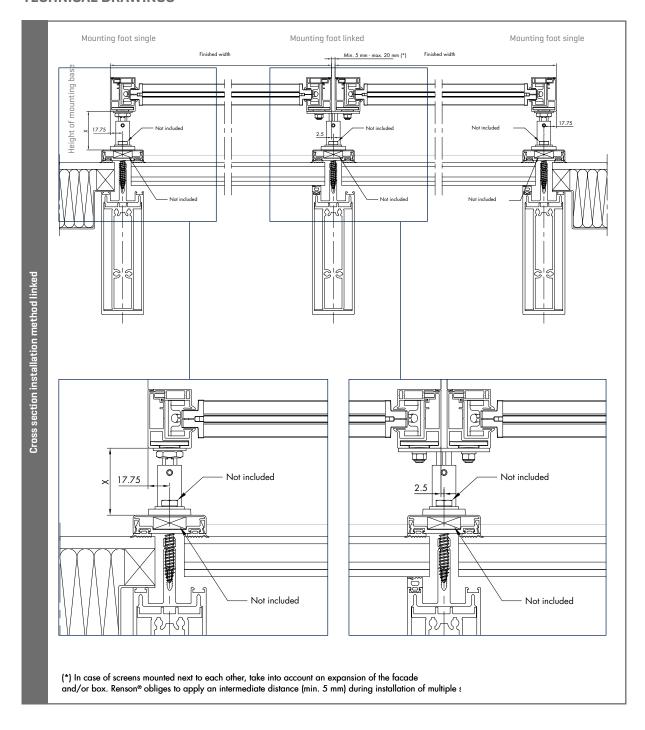




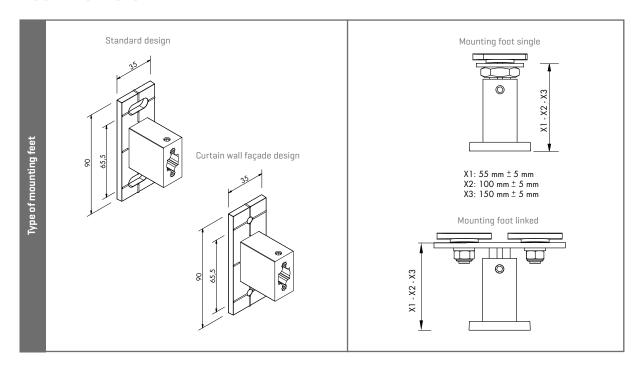
Viewing direction determines selection option cable feed left or right Position window



Installation method 1+ (IM 1+): surface-mounted, in front of the window, on mounting feet, with fully finished box



MOUNTING BASES



Determining the number of mounting feet in function of the width and height (W \times H) Single or linked system					
(in mm)	number of mounting feet single per side guiding channel mounting feet left or right		number of mounting feet linked per link		
			mounting feet middle		
type 55mm					
Width ≤	4000		4000		
Height ≤					
2000	2		2		
3500	2		2		
type 100mm					
Width≤	4000		4000		
Height ≤					
2000	3		3		
3100	4		4		
3500	5		5		
type 150mm					
Width ≤	4000		4000		
Height ≤					
2000	3		3		
3100	4		4		
3500	5		5		

Installation method 4 (IM 4): recessed, on top of the window, with box without removable profile





STANDARD (SLIDING) WINDOW

RECESSED



- Suitable for renovation
- Invisible integration
- Fabric tube removable from the inside







Single

Coupl

TECHNICAL DATA

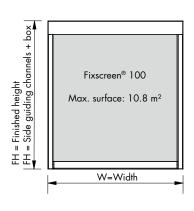
Design				
Box size (HxD)		100 x 100 mm		
Box extension		-		
Square		-		
Softline		✓		
Bottom bar retractable				
Recessed fabric tube		✓		
Wind resistance				
Wind class EN13561:2004		3		
Guaranteed wind resistance		Up to 130 km/h in closed position		
Application				
New buildings		✓		
Renovation		✓		
Residential		✓		
Non-residential		✓		
Control				
Motorized	Detecto Renson motor Safety First	-		
	Somfy mechanical motor	✓		
	Somfy, RTS radio-controlled motor	✓		
	Somfy, IO radio-controlled motor	✓		

Note:

 $\bullet\,\,$ The inside is finished by the carpenter and must be removable

DIMENSIONS

Motorized operation	Applicable fabrics	Dimensions		
Single screen	Fibreglass fabrics Polyester fabric Soltis Horizon 86 / Soltis Perform 92 Tuffscreen mosquito mesh	Min. width	795 mm	
		Max. width	4000 mm	3000 mm
		Min. height	300 mm	
		Max. height	2700 mm	3500 mm
		Max. surface	10,8 m²	10,5 m²
	Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Min. width	1000 mm	
		Max. width	2000 mm	
		Min. height	300 mm	
		Max. height	2700 mm	
		Max. surface	5,4 m²	
Coupled screen	Same as 'Single screen' 2-part [1 motor]	Max. width	6000 mm	
		Max. section width	4000 mm	
		Max. height	2700 mm	
		Max. total surface	16,2 m²	
	Same as 'Single screen' 2-part (2 motors)	Max. width coupled	6000 mm	
		Max. section width	4000 mm	
		Max. height	3500 mm	
		Max. total surface	21 m²	



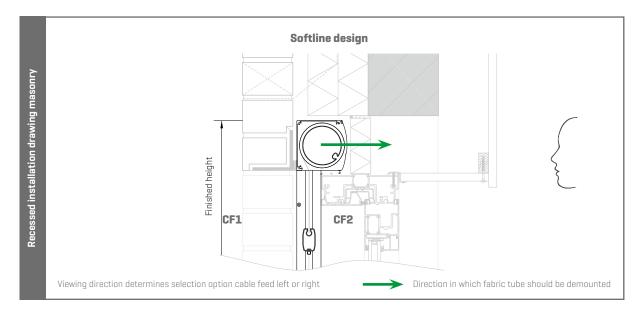
Note:

• Finished height = window height + 5mm + box height

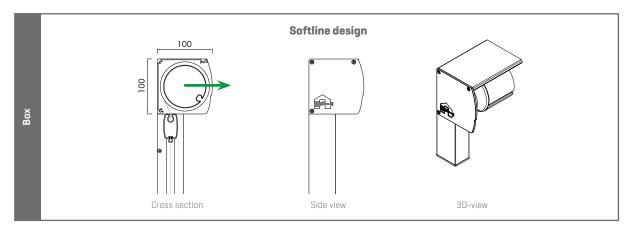
DURABILITY

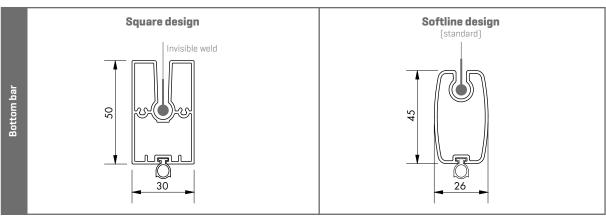
Technology				
Fixscreen-technology	✓			
Smooth-technology	✓			
Connect&Go-technology	✓			
Certificates				
Declaration of Performance (DoP)	DOP-2015SC00002			
Wind tunnel test report	N°113-25809			
Durability test report	WTCB N°651 XE823 CAR4139			
Warranty				
10-year warranty on coating of aluminium profiles	✓			
7-year warranty on Fixscreen-technology	✓			
5-year warranty for electronic controls [motor & automation]	✓			
5-year product warranty	✓			
5-year warranty on fabric collection	✓			
5-year warranty on gloss level	✓			

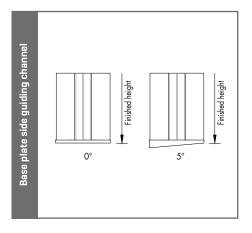
Installation method 4 (IM 4): recessed, on top of the window, with box without removable profile

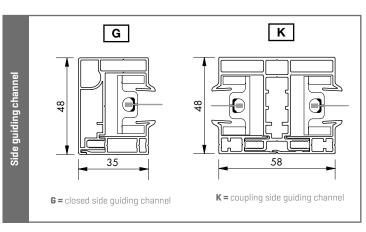


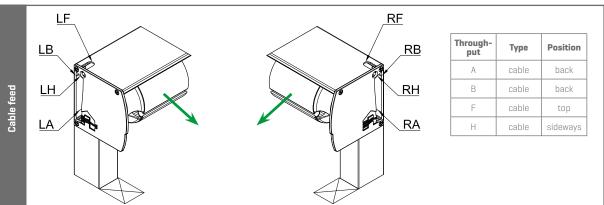
TECHNICAL DRAWINGS











Viewing direction determines selection option cable feed left or right Position window



Direction in which fabric tube should be demounted

Installation method 6 (IM 6): surface-mounted, in front of the window, with fully finished box













- Suitable for renovation
- Discrete and aesthetic integration
- Fabric tube removable from the inside





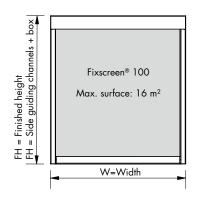


TECHNICAL DATA

Design			
Box size (HxD)		100 x 100 mm	
Box extension	(width left and/or right)	500 mm	
Square		✓	
Softline		✓	
Bottom bar ret	ractable	-	
Recessed fabri	c tube	✓	
Wind resistant	ce		
Wind class EN13561:2004		3	
Guaranteed wind resistance		Up to 130 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residentia	ıl	✓	
Control			
Motorized	Detecto Renson motor Safety First	✓	
	Somfy mechanical motor	✓	
	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	✓	

DIMENSIONS

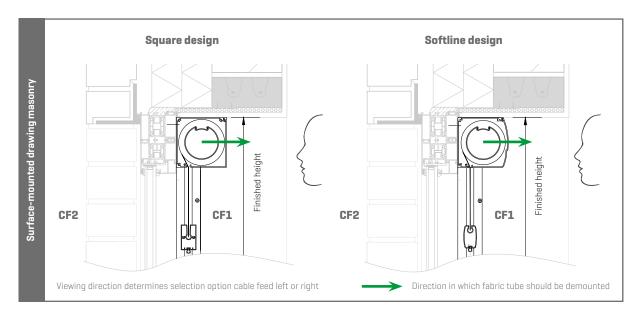
Motorized operation	Applicable fabrics	Dimensio	ns	
		Min. width	850 mm	
		Min. height	300 mm	
	Fibreglass fabrics Sergé / Natté	Max. width	5000 mm	4000 mm
	corgo / Marco	Max. height	2000 mm	4000 mm
		Max. surface	10 m²	16 m²
		Min. width	850 mm	
	Fibreglass fabric Privacy	Max. width	4000 mm	3000 mm
Single screen	Polyester fabric Soltis Horizon	Min. height	300 mm	
	86 / Soltis Perform 92	Max. height	2700 mm	3500 mm
		Max. surface	10,8 m²	10,5 m²
	Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Min. width	1000 mm	
		Max. width	4000 mm	
		Min. height	300 mm	
		Max. height	2800 mm	
		Max. surface	11,2 m²	
	Same as 'Single screen' 2-part [1 motor]	Min. width	1590 mm	
		Max. width	6000 mm (Max. section width 5000 mm)	
		Min. height	300 mm	
		Max. height	2000 mm	
		Max. total surface	12 m²	
Coupled screen		Min. width	1590 mm	
		Max. width	6000 mm (Max. section width 4000 mm)	
	Same as 'Single screen' 2-part [2 motors]	Min. height	300 mm	
	c-hair (5 illorois)	Max. height	4000 mm	
		Max. total surface	24 m² (1 p max. surfa	

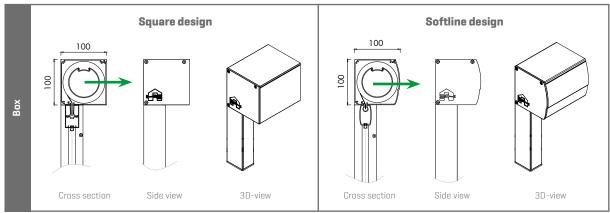


DURABILITY

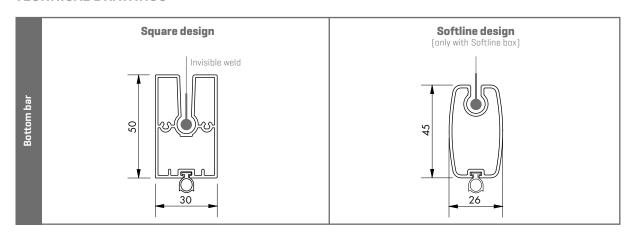
Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	\checkmark

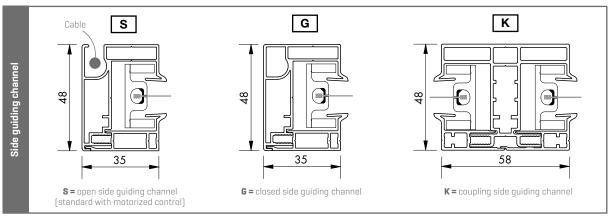
Installation method 6 (IM 6): surface-mounted, in front of the window, with fully finished box

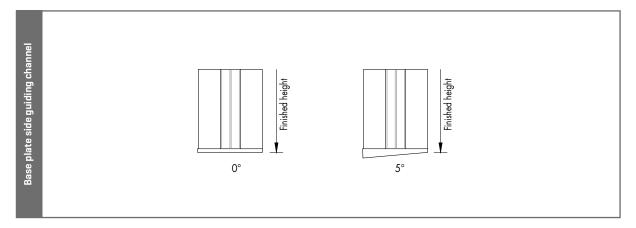


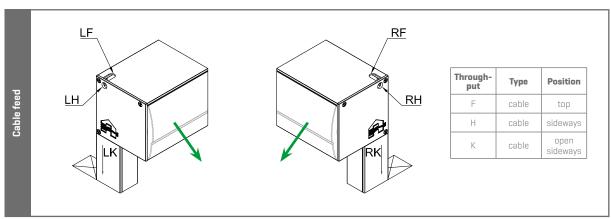


TECHNICAL DRAWINGS









Viewing direction determines selection option cable feed left or right Position window



FIXSCREEN® 100 SOLAR









FIXSCREEN® 100 SOLAR

Installation method 1 (IM 1): surface-mounted, in front of the window, with fully finished box

VERTICAL

WINDPROOF

STANDARD (SLIDING) WINDOW



• Fabric tube removable from the outside





TECHNICAL DATA

Design			
Box size incl. tube profile (H x D)		130 x 100 mm	
Square		✓	
Partially retrac	able bottom bar	✓	
Recessed fabri	c tube	✓	
Windproof rati	ng		
Wind class EN13561:2004		3	
Guaranteed wind resistance		up to 130 km/h when closed	
Application			
Newbuild proje	et	✓	
Renovation		✓	
Residential		✓	
Utility		✓	
Controls			
Motorised	Somfy radio-controlled motor	/	



Option separate solar cell

NOT SURE WHETHER TO GO FOR SOLAR-POWERED RENSON® EXTERNAL SUN PROTECTION SCREENS?

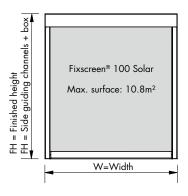


The Somfy Solar app enables you to see which Solar solutions might be suitable, in advance and in a specific environment. The app is available for free in the App Store and via Google Play.



DIMENSIONS

Motorised controls	Fabric options	Dimensio	ns	
	Fibreglass fabric Soltis polyester fabric 86 / 92 Tuffscreen insect mesh	Min. width	650 mm	
		Max. width	4000 mm	3000 mm
		Min. height	300 mm	
		Max. height	2700 mm	3500 mm
Cinala sausan		Max. surface area	10,8 m²	10,5 m²
Single screen	Satiné blackout fibreglass fabric 21154 Soltis blackout polyester fabric B92	Min. width	1000 mm	
		Max. width	2000 mm	
		Min. height	300 mm	
		Max. height	2700 mm	
		Max. surface area	5,4 m²	

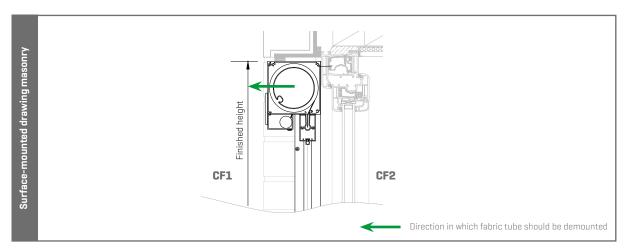


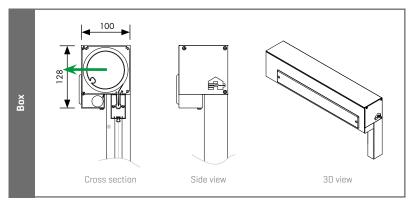
DURABILITY

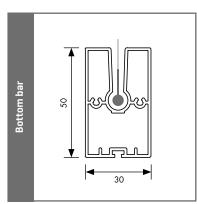
Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2018SC00009
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
7-year warranty on Detecto Renson motor Safety First	✓
7-year warranty for electronic controls [motor, solar cell, battery & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

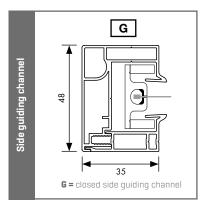
FIXSCREEN® 100 SOLAR

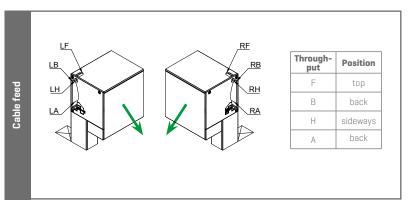
Installation method 1 (IM 1): surface-mounted, in front of the window, with fully finished box

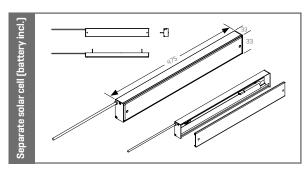


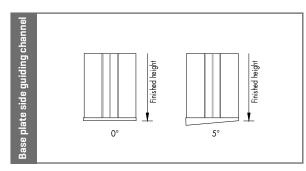
















FIXSCREEN® 100 SLIM







Fixscreen® 100 Slim / VERTICAL SUN PROTECTION

FIXSCREEN® 100 SLIM

Installation method 7A (IM 7A): surface-mounted or recessed, in front of the window, with fully finished box

VERTICAL

WINDPROOF

STANDARD (SLIDING) WINDOW

SURFACE MOUNTED/ RECESSED





- Fabric close to the window
- Multi-functionally applicable
- Invisible integration
- Fabric tube removable from the bottom







gle

TECHNICAL DATA

Design				
Box size [HxD]		150 x 110 mm		
Box extension (w	idth left and/or right)	500 mm		
Square		\checkmark		
Softline		-		
Bottom bar retra	ctable	✓		
Recessed fabric	tube	✓		
Wind resistance				
Wind class EN13	561:2004	3		
Guaranteed wind resistance		Up to 130 km/h in closed position		
Application				
New buildings		✓		
Renovation		✓		
Residential		✓		
Non-residential		✓		
Control				
	Detecto Renson motor Safety First	✓		
	Somfy mechanical motor	✓		
Motorized	Somfy, RTS radio-controlled motor	✓		
	Somfy, IO radio-controlled motor	✓		

Note:

- Box extension not possible in case of side guiding channel D
- Plaster profile is optional

Tip:

If a door handle, handle of a sliding door or a fly screen could possibly prevent the free operation of the fabric, choose installation method 7B (see page 54). This installation allows the fabric to run away from the window and a free course is ensured.



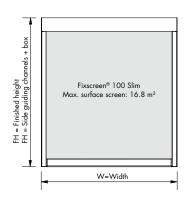


IM 7A

IM 7B

DIMENSIONS

Motorized operation	Applicable fabrics	Dimension	าร	
		Min. width	850 mm	
		Min. height	300 mm	
	Fibreglass fabrics Sergé / Natté	Max. width	6000 mm	4000 mm
	oorgo / Natto	Max. height	2800 mm	4000 mm
		Max. surface	16,8 m²	16 m²
		Min. width	900 mm	
	Fibreglass fabric Privacy	Max. width	4500 mm	3000 mm
Single screen	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. height	300 mm	
	Tuffscreen mosquito mesh	Max. height	2800 mm	3500 mm
		Max. surface	12,6 m²	10,5 m²
		Min. width	1000 mm	
	Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Max. width	4000 mm	
		Min. height	300 mm	
		Max. height	2800 mm	
		Max. surface	11,2 m²	
	Same as 'Single screen' 2-part (1 motor)	Min. width	1800 mm	
		Max. width	6000 mm (Max. section width 5000 mm)	
		Min. height	300 mm	
		Max. height	2800 mm	
		Max. total surface	16,8 m²	
Coupled screen		Min. width	1800 mm	
	Same as 'Single screen'	Max. width	6000 mm (Max. secti 4000 mm)	on width
	2-part [2 motors]	Min. height	300 mm	
	2 part (2 motors)	Max. height	4000 mm	
		Max. total surface	24 m² (1 pa max. surfa	
Coupled screen m	net Panovista: see page 149			



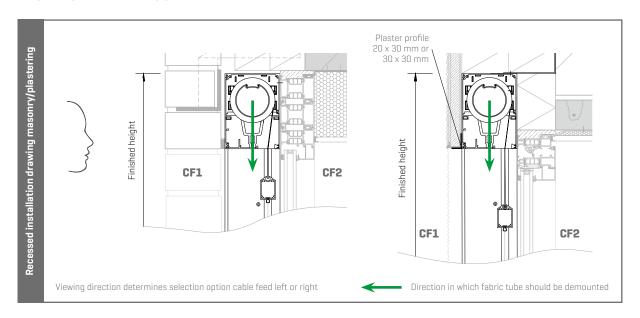
DURABILITY

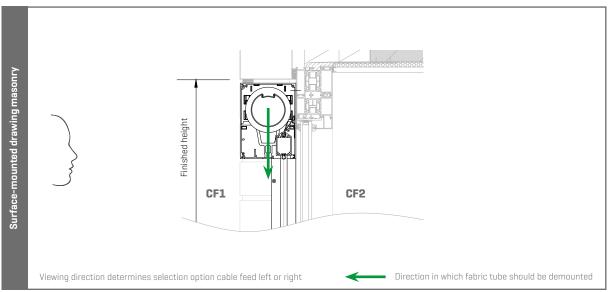
Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

FIXSCREEN® 100 SLIM

Installation method 7A (IM 7A): surface-mounted or recessed, in front of the window, with fully finished box

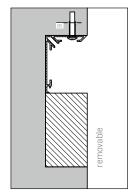
TECHNICAL DRAWINGS

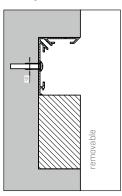


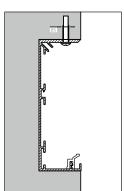


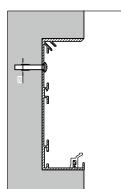
Note:

• When choosing the narrow side guiding channel G, the customer must provide something removable below the box to facilitate removing the fabric tube towards the bottom. [H = min. 680 mm]

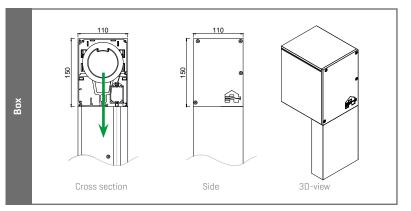


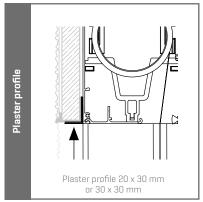


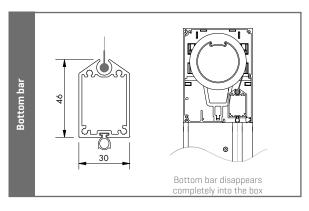


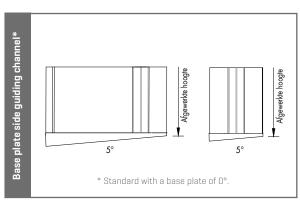


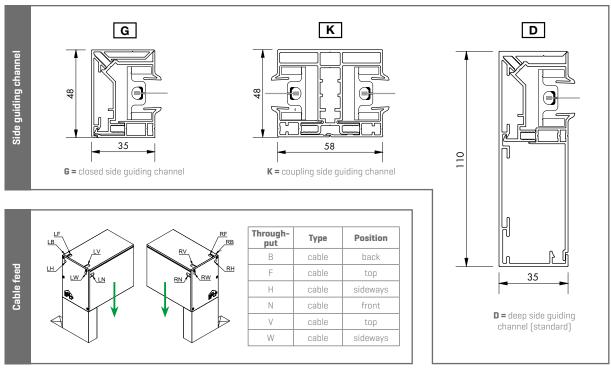
TECHNICAL DRAWINGS











Viewing direction determines selection option cable feed left or right Position window

Direction in which fabric tube should be demounted

FIXSCREEN® 100 SLIM

Installation method 7B (IM 7B): surface-mounted or recessed, in front of the window, with fully finished box

VERTICAL

WINDPROOF

STANDARD (SLIDING) WINDOW

SURFACE MOUNTED/ RECESSED





- Fabric away from the window, perfect to combine with mosquito mesh, door handle, ...
- Suitable for renovation
- Invisible integration
- Fabric tube removable from the bottom





Single

TECHNICAL DATA

Design			
Box size (HxD)		150 x 110 mm	
Box extension	(width left and/or right)	500 mm	
Square		✓	
Softline		-	
Bottom bar re	tractable	✓	
Recessed fabr	ic tube	✓	
Wind resistan	се		
Wind class EN13561:2004		3	
Guaranteed wind resistance		Up to 130 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residentia	al	✓	
Control			
Motorized	Detecto Renson motor Safety First	✓	
	Somfy mechanical motor	✓	
	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	✓	

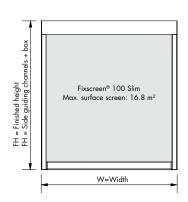
Note:

- Please note that in case of a mechanical motor, the window must be able to open in full width to adjust the end points
- Box extension not possible in case of side quiding channel D
- Plaster profile is optional

With Fixscreen 100 Slim IM7B, a saw cut can optionally be made in the deep side guiding channel if a balustrade is fitted, so that the middle profile and front profile can easily be removed for service after installation. See drawings on pages 58-59

DIMENSIONS

Motorized operation	Applicable fabrics	Dimension	าร	
		Min. width	900 mm	
		Min. height	300 mm	
	Fibreglass fabrics Sergé / Natté	Max. width	6000 mm	4000 mm
	oorgo / Nacco	Max. height	2800 mm	4000 mm
		Max. surface	16,8 m²	16 m²
		Min. width	900 mm	
	Fibreglass fabric Privacy	Max. width	4500 mm	3000 mm
Single screen	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. height	300 mm	
	Tuffscreen mosquito mesh	Max. height	2800 mm	3500 mm
		Max. surface	12,6 m²	10,5 m²
		Min. width	1000 mm	
	Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Max. width	2000 mm	
		Min. height	300 mm	
		Max. height	2800 mm	
		Max. surface	5,6 m ²	
	Same as 'Single screen'	Min. width	1800 mm	
		Max. width	6000 mm (Max. secti 5000 mm)	on width
	2-part (1 motor)	Min. height	300 mm	
		Max. height	2800 mm	
		Max. total surface	16,8 m²	
Coupled screen		Min. width	1800 mm	
	Same as 'Single screen' 2-part [2 motors]	Max. width	6000 mm (Max. section width 4000 mm)	
		Min. height	300 mm	
		Max. height	4000 mm	
		Max. total surface	24 m² (1 p max. surfa	



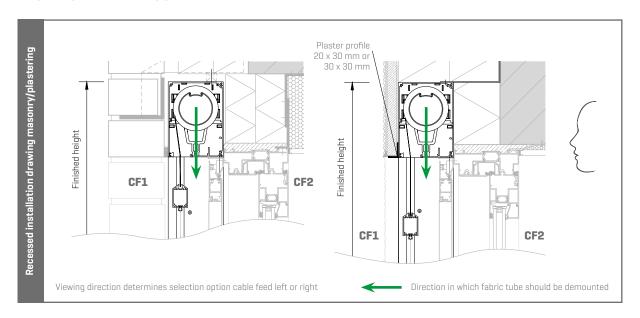
DURABILITY

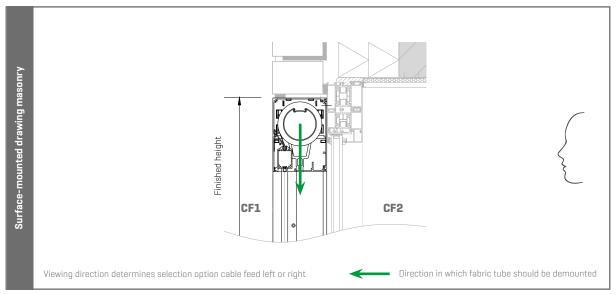
Technology		
Fixscreen-technology	✓	
Smooth-technology	✓	
Connect&Go-technology	✓	
Certificates		
Declaration of Performance (DoP)	DOP-2015SC00002	
Wind tunnel test report	N°113-25809	
Durability test report	WTCB N°651 XE823 CAR4139	
Warranty		
10-year warranty on coating of aluminium profiles	✓	
7-year warranty on Fixscreen-technology	✓	
7-year warranty on Detecto Renson motor Safety First	✓	
5-year warranty for electronic controls [motor & automation]	✓	
5-year product warranty	✓	
5-year warranty on fabric collection	✓	
5-year warranty on gloss level	✓	

FIXSCREEN® 100 SLIM

Installation method 7B (IM 7B): surface-mounted or recessed, in front of the window, with fully finished box

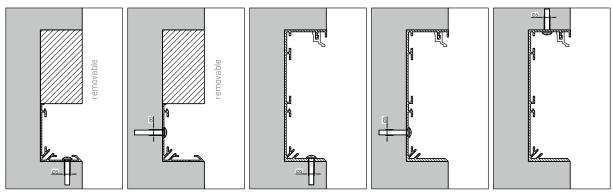
TECHNICAL DRAWINGS



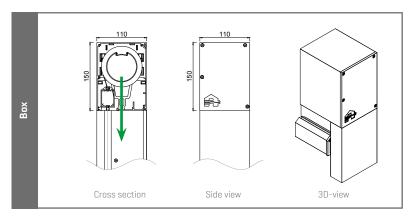


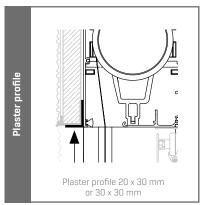
Note

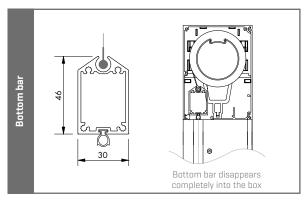
• When choosing narrow side guiding channels G, the customer must provide something removable below the box so that the fabric tube can be removed from the bottom. [H = min. 680 mm]

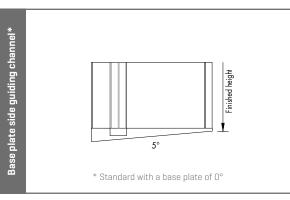


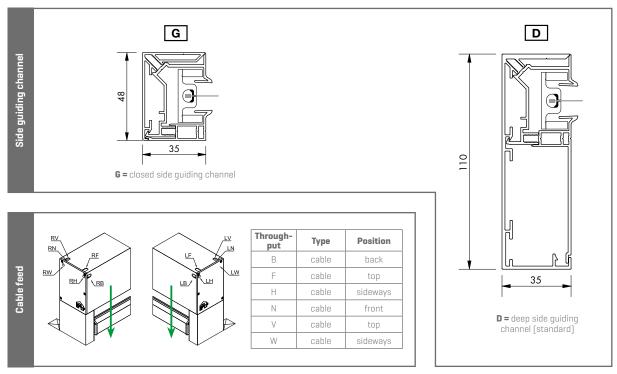
TECHNICAL DRAWINGS











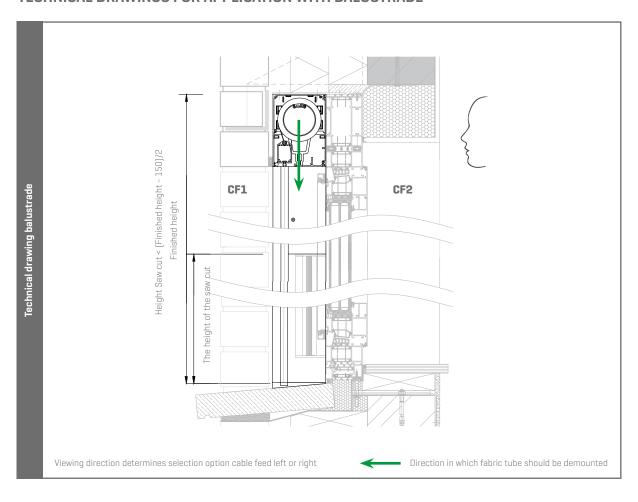
Viewing direction determines selection option cable feed left or right Position window

Direction in which fabric tube should be demounted

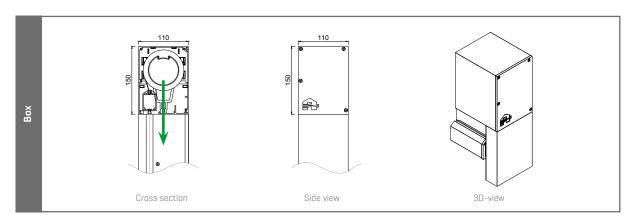
FIXSCREEN® 100 SLIM

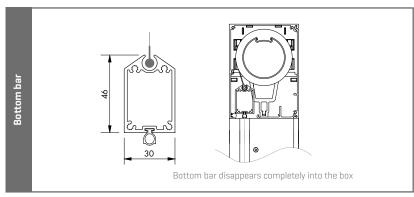
Installation method 7B (IM 7B): surface-mounted or recessed, in front of the window, with fully finished box

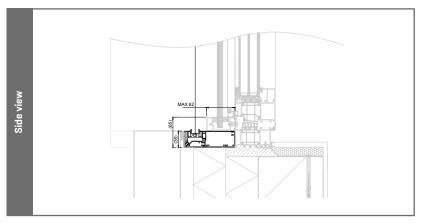
TECHNICAL DRAWINGS FOR APPLICATION WITH BALUSTRADE

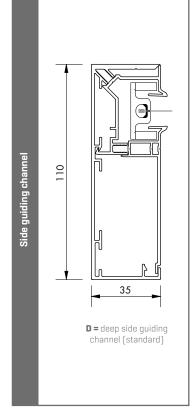


TECHNICAL DRAWINGS FOR APPLICATION WITH BALUSTRADE









Viewing direction determines selection option cable feed left or right Position window

Direction in which fabric tube should be demounted







Fixscreen® 150 / VERTICAL SUN PROTECTION

Installation method 1 (IM 1): surface-mounted, in front of the window, with fully finished box











Square design



Softline design

- Suitable for large dimensions
- Discrete and aesthetic integration
- Fabric tube removable from the outside





TECHNICAL DATA

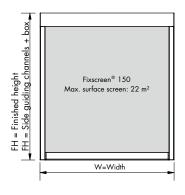
Design			
Box size (HxD)		150 x 155 mm	
Box extension (w	idth left and/or right)	500 mm	
Square		✓	
Softline		✓	
Bottom bar retrad	ctable	✓	
Recessed fabric t	ube	✓	
Wind resistance			
Wind class EN135	561:2004	3	
Guaranteed wind resistance		Up to 130 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residential		✓	
Control			
	Detecto Renson motor Safety First	✓	
Motorized	Somfy mechanical motor	✓	
	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	✓	

Note:

• Mounting recommended with a minimum of 2 persons. Weight: ± 23 kg/m.

DIMENSIONS

Motorized operation	Applicable fabrics	Dimension	ıs
	Fibreglass fabrics Polyester fabric Soltis Horizon 86 / Soltis Perform 92 Tuffscreen mosquito mesh	Min. width	905 mm
		Max. width	6000 mm
		Min. height	300 mm
		Max. height	6000 mm
Cinale serses		Max. surface	22 m²
Single screen	Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Min. width	1000 mm
		Max. width	6000 mm
		Min. height	300 mm
		Max. height	4000 mm
		Max. surface	16 m²
	Same as 'Single screen' 2-part (1 or 2 motors)	Min. width	1810 mm
Coupled screen		Max. width	6000 mm (Max. section width 5000 mm)
		Min. height	300 mm
		Max. height	6000 mm
		Max. total surface (1 motor)	22 m²
		Max. total surface (2 motors)	36m² (of which 1 section with a max. surface 22m²)



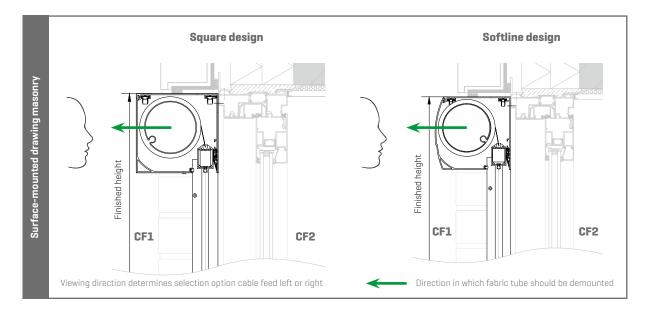
Note:

- Detecto Renson motor Safety First: always coupled with 2 motors
- If coupled to a single motor and black out fabric, max. surface 16 $\mbox{m}^2.$

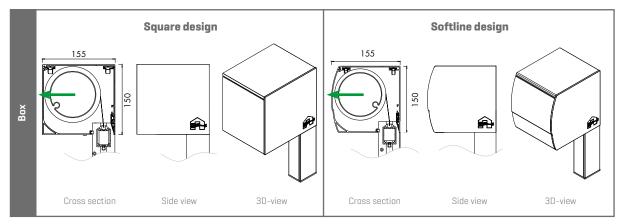
DURABILITY

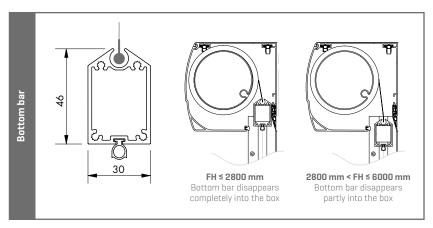
Technology		
Fixscreen-technology	✓	
Smooth-technology	✓	
Connect&Go-technology	✓	
Certificates		
Declaration of Performance (DoP)	DOP-2015SC00002	
Wind tunnel test report	N°113-25809	
Durability test report	WTCB N°651 XE823 CAR4139	
Warranty		
10-year warranty on coating of aluminium profiles	✓	
7-year warranty on Fixscreen-technology	✓	
7-year warranty on Detecto Renson motor Safety First	✓	
5-year warranty for electronic controls [motor & automation]	✓	
5-year product warranty	✓	
5-year warranty on fabric collection	✓	
5-year warranty on gloss level	✓	

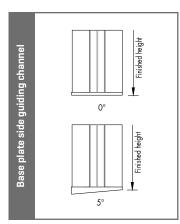
Installation method 1 (IM 1): surface-mounted, in front of the window, with fully finished box

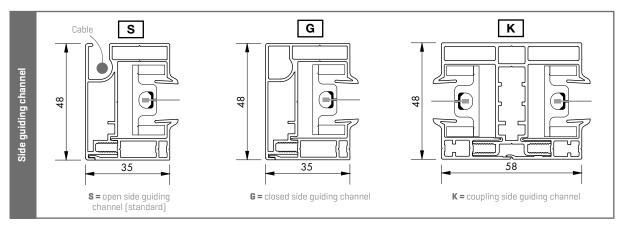


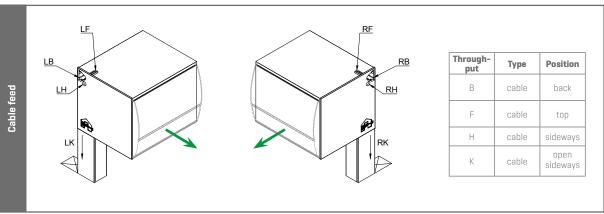
TECHNICAL DRAWINGS











Viewing direction determines selection option cable feed left or right Position window



Direction in which fabric tube should be demounted

Installation method 1+ (IM 1+): surface-mounted, in front of the window, on mounting feet, with fully finished box

VERTICAL

WINDPROOF

STANDARD (SLIDING) WINDOW





Square design



Softline design

- Suitable for curtain wall façades
- Discrete and aesthetic integration
- Fabric tube removable from the outside





TECHNICAL DATA

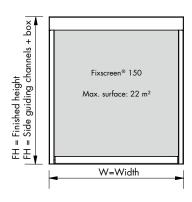
Design			
Box size (HxD)		150 x 155 mm	
Box extension (wi	idth left and/or right)	500 mm	
Square		✓	
Softline		✓	
Bottom bar retrac	ctable	✓	
Recessed fabric tube		✓	
Wind resistance			
Wind class EN13561:2004		3	
Guaranteed wind resistance		Up to 80 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residential		✓	
Control	Control		
	Detecto Renson motor Safety First	✓	
Motorized	Somfy mechanical motor	✓	
	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	✓	

Note:

• Mounting recommended with a minimum of 2 persons. Weight: ± 23 kg/m.

DIMENSIONS

Motorized operation	Applicable fabrics	Dimensions	
Single screen	Fibreglass fabrics Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. width	905 mm
		Max. width	6000 mm
		Min. height	300 mm
		Max. height	6000 mm
		Max. surface	22 m²
Linkable		Required intermediate size (expansion): 1 mm per 1000 mm width	



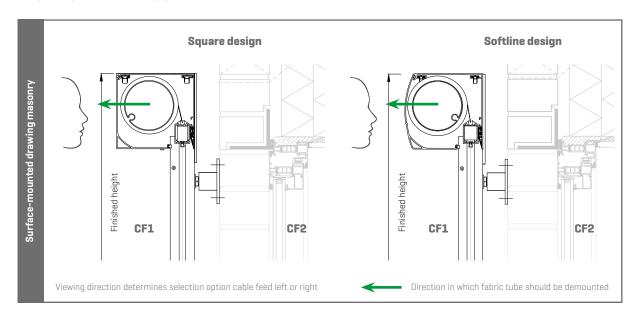
Note:

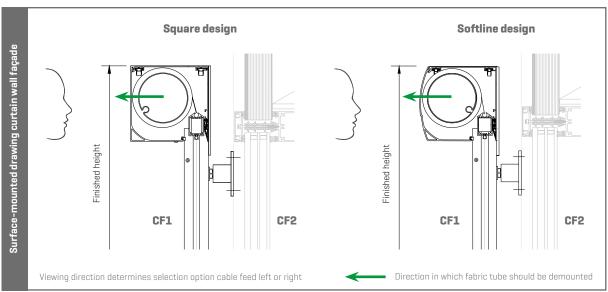
• Coupling is not possible

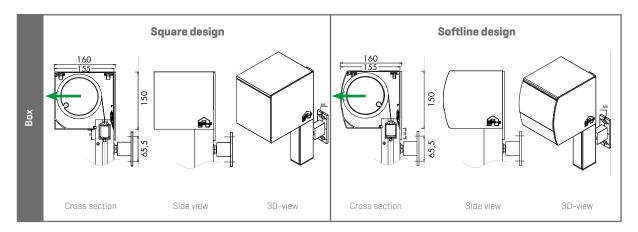
DURABILITY

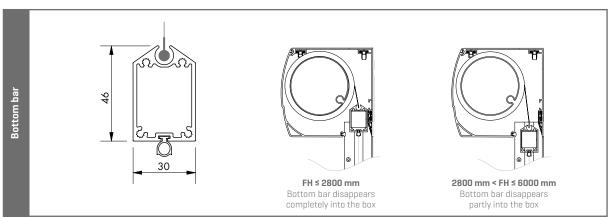
Technology		
Fixscreen-technology	✓	
Smooth-technology	✓	
Connect&Go-technology	✓	
Certificates		
Declaration of Performance (DoP)	DOP-2015SC00002	
Wind tunnel test report	N°113-25809	
Durability test report	WTCB N°651 XE823 CAR4139	
Warranty		
10-year warranty on coating of aluminium profiles	✓	
7-year warranty on Fixscreen-technology	✓	
7-year warranty on Detecto Renson motor Safety First	✓	
5-year warranty for electronic controls [motor & automation]	✓	
5-year product warranty	✓	
5-year warranty on fabric collection	✓	
5-year warranty on gloss level	✓	

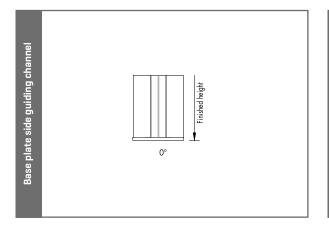
Installation method 1+ (IM 1+): surface-mounted, in front of the window, on mounting feet, with fully finished box

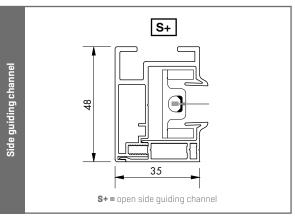


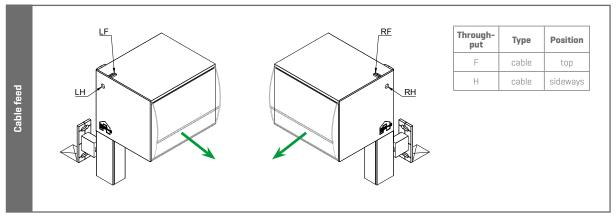








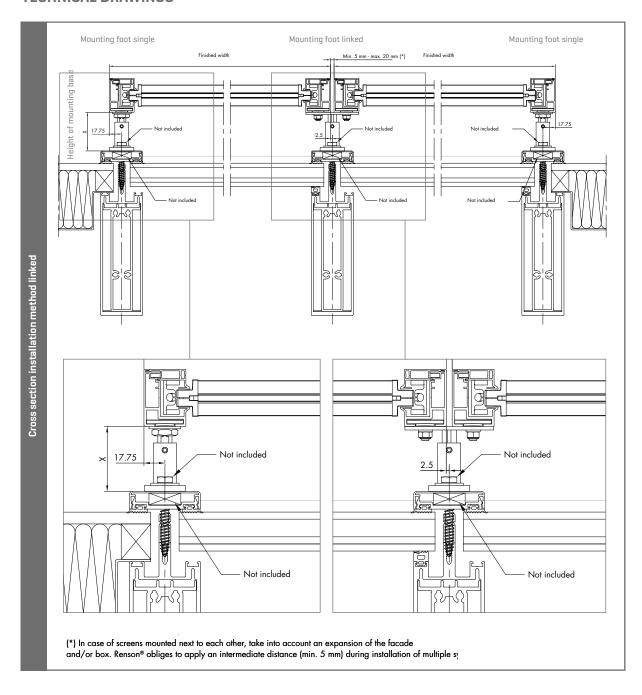




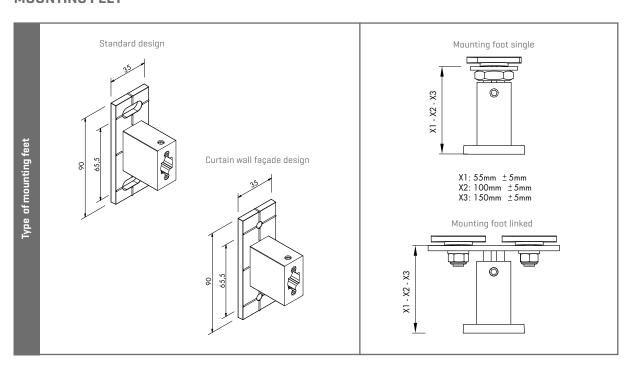
Viewing direction determines selection option cable feed left or right Position window



Installation method 1+ (IM 1+): surface-mounted, in front of the window, on mounting bases with fully finished box



MOUNTING FEET



	Determining the num	ber of mounting foot in function Single or linked system	n of the width and height (W x H) m	
(in mm)	number of mounting feet single per side guiding channel mounting feet left or right		number of mounting feet linked per link mounting feet middle	
type 55mm				
Width≤	4000	6000	4000	6000
Height ≤				
2000	2	2	2	2
4000	2	2	2	3
5200	3	3	3	3
6000	4	4	4	4
type 100mm				
Width≤	4000	6000	4000	6000
Height ≤				
2000	3	3	3	4
3100	4	4	4	5
4000	5	5	5	7
4600	7	7	7	7
5300	8	8	8	8
6000	9	9	9	9
type 150mm				
Width≤	4000	6000	4000	6000
Height ≤				
2000	3	4	3	4
3100	4	5	4	5
4000	5	7	5	7
4600	7	7	7	7
5300	8	8	8	8
6000	9	9	9	9

Installation method 4 (IM 4): recessed, on top of the window, with box without removable profile





STANDARD (SLIDING) WINDOW

RECESSED



- Suitable for large dimensions
- Invisible integration
- Fabric tube removable from the inside





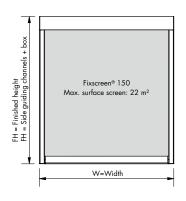
TECHNICAL DATA

Design		
Box size (HxD)		150 x 155 mm
Box extension		-
Square		✓
Softline		-
Bottom bar retrad	ctable	✓
Recessed fabric t	ube	✓
Wind resistance		
Wind class EN13561:2004		3
Guaranteed wind resistance		Up to 130 km/h in closed position
Application		
New buildings		✓
Renovation		✓
Residential		✓
Non-residential		✓
Control		
	Detecto Renson motor Safety First	-
	Somfy mechanical motor	✓
Motorized	Somfy, RTS radio-controlled motor	✓
	Somfy, IO radio-controlled motor	✓

Note:

- The inside is finished by the carpenter and must be removable
- $\bullet\,$ Mounting recommended with a minimum of 2 persons. Weight: ± 23 kg/m.

Motorized operation	Applicable fabrics	Dimension	ns
		Min. width	905 mm
	Fibreglass fabrics	Max. width	6000 mm
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. height	300 mm
	Tuffscreen mosquito mesh	Max. height	6000 mm
0'		Max. surface	22 m²
Single screen		Min. width	1000 mm
	Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Max. width	6000 mm
		Min. height	300 mm
		Max. height	4000 mm
		Max. surface	16 m²
	Same as 'Single screen' 2-part [1 or 2 motors]	Min. width	1810 mm
		Max. width	6000 mm (Max. section width 5000 mm)
		Min. height	300 mm
Coupled screen		Max. height	6000 mm
		Max. total surface (1 motor)	22 m²
		Max. total surface [2 motors]	36m² (of which 1 section with a max. surface 22m²)



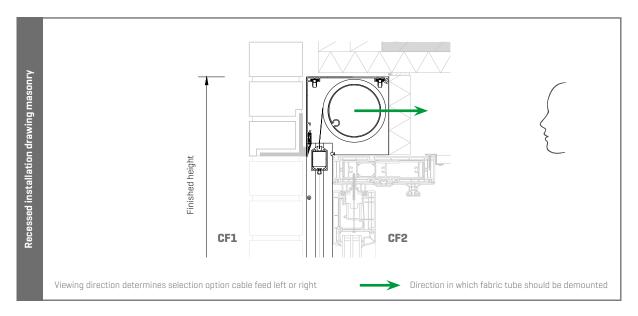
Note:

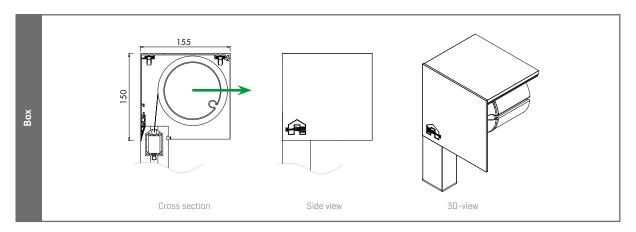
- Finished height = window height + 5mm + box height
- If coupled to a single motor and black out fabric, max. surface 16 m².

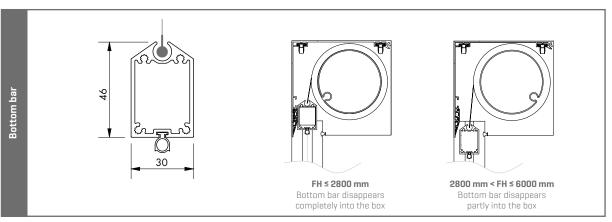
Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

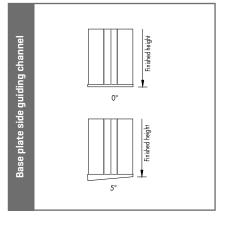
Installation method 4 (IM 4): recessed, on top of the window, with box without removable profile

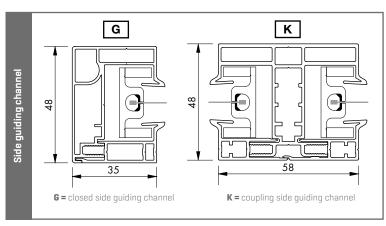
TECHNICAL DRAWINGS

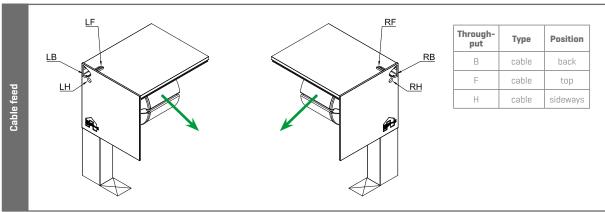












Viewing direction determines selection option cable feed left or right Position window



Installation method 6 (IM 6): surface-mounted, in front of the window, with fully finished box











Square design



Softline design

- Suitable for large dimensions
- Discrete and aesthetic integration
- Fabric tube removable from the inside





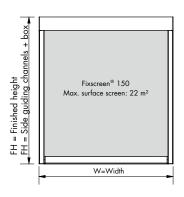
TECHNICAL DATA

Design		
Box size (HxD)		150 x 155 mm
Box extension (width left and/or right)		500 mm
Square		✓
Softline		✓
Bottom bar retrac	ctable	✓
Recessed fabric t	ube	✓
Wind resistance		
Wind class EN13561:2004		3
Guaranteed wind resistance		Up to 130 km/h in closed position
Application		
New buildings		✓
Renovation		✓
Residential		✓
Non-residential		✓
Control		
	Detecto Renson motor Safety First	✓
	Somfy mechanical motor	✓
Motorized	Somfy, RTS radio-controlled motor	✓
	Somfy, IO radio-controlled motor	✓

Note:

• Mounting recommended with a minimum of 2 persons. Weight: ± 23 kg/m.

Motorized operation	Applicable fabrics	Dimension	ıs
		Min. width	905 mm
	Fibreglass fabrics	Max. width	6000 mm
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. height	300 mm
	Tuffscreen mosquito mesh	Max. height	6000 mm
Cinala sausan		Max. surface	22 m²
Single screen		Min. width	1000 mm
	Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Max. width	6000 mm
		Min. height	300 mm
		Max. height	4000 mm
		Max. surface	16 m²
Coupled screen	Same as 'Single screen' 2-part (1 or 2 motors)	Min. width	1590 mm
		Max. width	6000 mm (Max. section width 5000 mm)
		Min. height	300 mm
		Max. height	6000 mm
		Max. total surface (1 motor)	22 m²
		Max. total surface (2 motors)	36m² (of which 1 section with a max. surface 22m²)



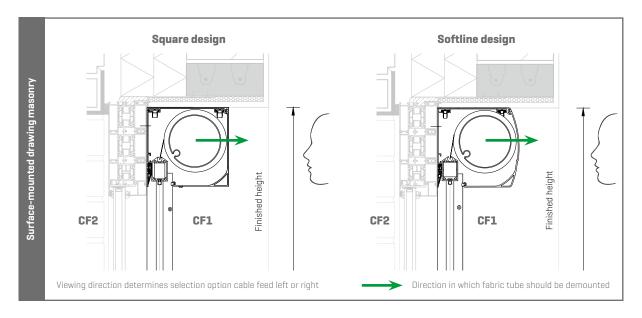
Note:

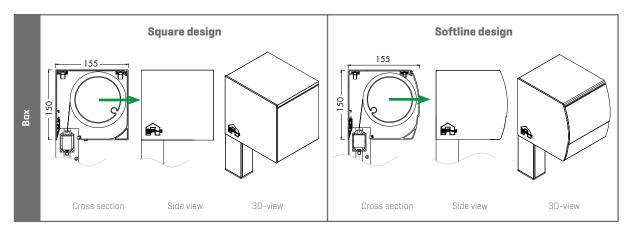
- Detecto Renson motor Safety First: always coupled with 2 motors
- If coupled to a single motor and black out fabric, max. surface 16 $\mbox{m}^2.$

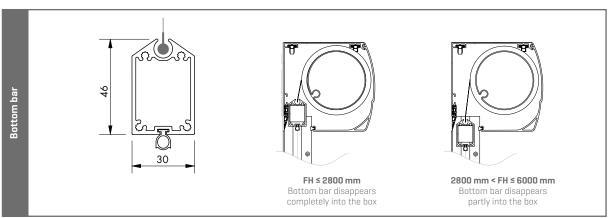
Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

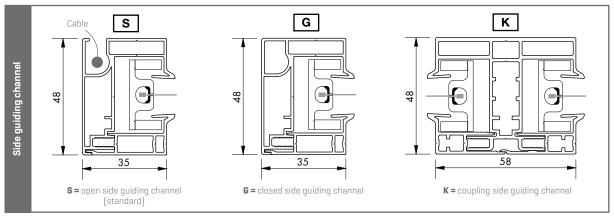
Installation method 6 (IM 6): surface-mounted, in front of the window, with fully finished box

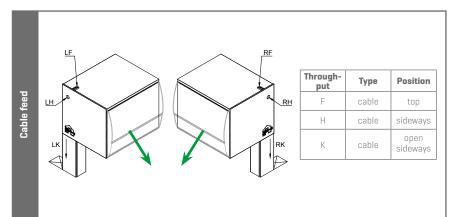
TECHNICAL DRAWINGS

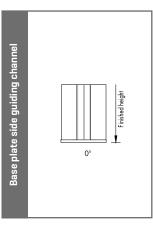












Viewing direction determines selection option cable feed left or right Position window



Installation method 7A (IM 7A): recessed, in front of the window, with fully finished box

VERTICAL

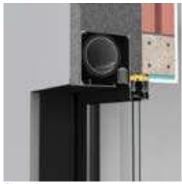
WINDPROOF

STANDARD (SLIDING) WINDOW

RECESSED



Masonry



Plastering

- Fabric close to the window
- Suitable for large dimensions
- Invisible integration
- Fabric tube removable from the bottom





TECHNICAL DATA

Design			
Box size (HxD)		150 x 155 mm	
Box extension (width left and/or right)		500 mm	
Square		✓	
Softline		-	
Bottom bar retra	ctable	✓	
Recessed fabric t	ube	✓	
Wind resistance			
Wind class EN13561:2004		3	
Guaranteed wind resistance		Up to 130 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residential		✓	
Control			
	Detecto Renson motor Safety First	✓	
	Somfy mechanical motor	✓	
Motorized	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	✓	

Note:

- Mounting recommended with a minimum of 2 persons. Weight: ± 23 kg/m.
- Box extension not possible in case of side guiding channel D
- Plaster profile is optional

Tip:

If a door handle, handle of a sliding door or a fly screen could possibly prevent the free operation of the fabric, choose installation method 7B (see page 84). This installation allows the fabric to run away from the window and a free course is ensured.

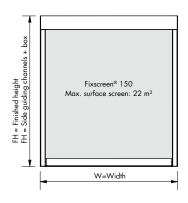




IM 7A

M 7B

Motorized operation	Applicable fabrics	Dimension	ıs
		Min. width	909 mm
	Fibreglass fabrics	Max. width	6000 mm
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92 Tuffscreen mosquito mesh	Min. height	300 mm
		Max. height	6000 mm
Cinala sarasa		Max. surface	22 m²
Single screen		Min. width	1000 mm
	Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Max. width	6000 mm
		Min. height	300 mm
		Max. height	4000 mm
		Max. surface	16 m²
	Same as 'Single screen' 2-part (1 or 2 motors)	Min. width	1818 mm
		Max. width	6000 mm (Max. section width 5000 mm)
		Min. height	300 mm
Coupled screen		Max. height	6000 mm
		Max. total surface (1 motor)	22 m²
		Max. total surface (2 motors)	36m² (of which 1 section with a max. surface 22m²)



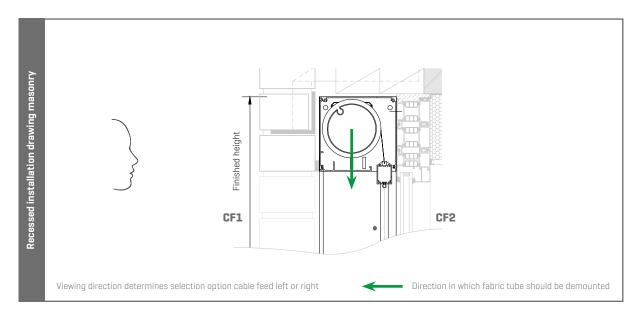
Note:

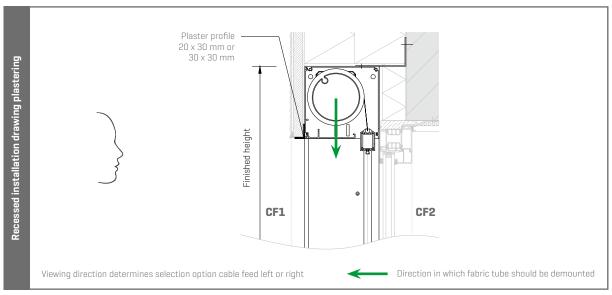
- Detecto Renson motor Safety First: always coupled with 2 motors
- If coupled to a single motor and black out fabric, max. surface 16 m².

Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

Installation method 7A (IM 7A): recessed, in front of the window, with fully finished box

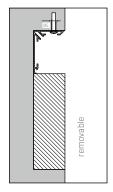
TECHNICAL DRAWINGS

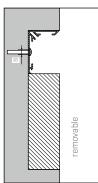


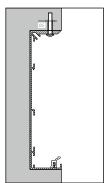


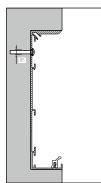
Note:

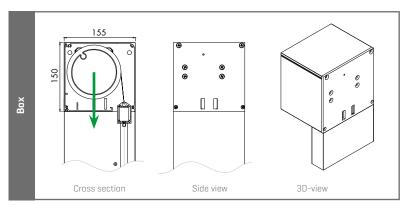
• When choosing narrow side guiding channels G, the customer must provide something removable below the box so that the fabric tube can be removed from the bottom. [H = min. 680 mm]

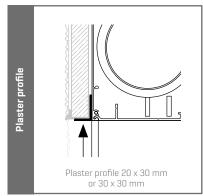


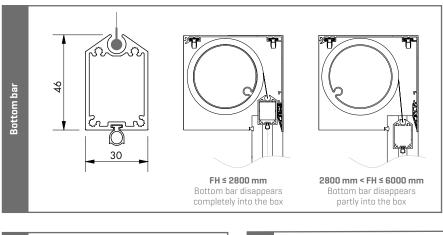


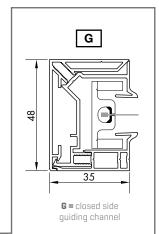




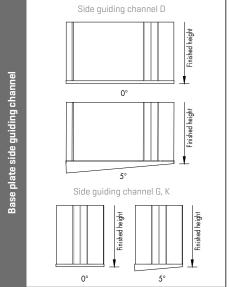


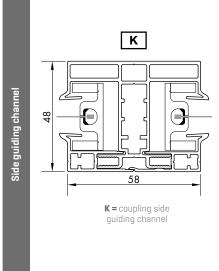


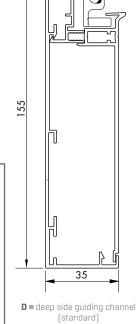




D







Cable feed

Through- put	Туре	Position
В	cable	back
F	cable	top
Н	cable	sideways
N	cable	front
V	cable	top
W	cable	sideways

Viewing direction determines selection option cable feed left or right Position window



Installation method 7B (IM 7B): recessed, in front of the window, with fully finished box

VERTICAL

WINDPROOF



RECESSED



Masonry



Plastering

- Fabric away from the window, perfect to combine with mosquito mesh, door handle, ...
- Suitable for renovation
- Invisible integration
- Fabric tube removable from the bottom





TECHNICAL DATA

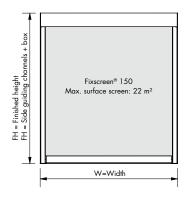
Design			
Box size (HxD)		150 x 155 mm	
Box extension (width left and/or right)		500 mm	
Square		✓	
Softline		-	
Bottom bar retra	ctable	✓	
Recessed fabric t	ube	✓	
Wind resistance			
Wind class EN13561:2004		3	
Guaranteed wind resistance		Up to 130 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residential		✓	
Control			
	Detecto Renson motor Safety First	✓	
	Somfy mechanical motor	✓	
Motorized	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	✓	

Note:

- Mounting recommended with a minimum of 2 persons. Weight: ± 23 kg/m.
- Box extension not possible in case of side guiding channel D
- Take note that, in case of a mechanical motor, the window must be able to open in full width to adjust the end points.
- Plaster profile is optional

With Fixscreen 150 MS7B a saw cut can optionally be made in the deep side guiding channel if a balustrade is fitted, so that the middle profile and front profile can easily be removed for service after installation. See drawings on pages 88-89

Motorized operation	Applicable fabrics	Dimension	ıs
		Min. width	909 mm
	Fibreglass fabrics	Max. width	6000 mm
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. height	300 mm
	Tuffscreen mosquito mesh Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque B92	Max. height	6000 mm
0:		Max. surface	22 m²
Single screen		Min. width	1000 mm
		Max. width	6000 mm
		Min. height	300 mm
		Max. height	4000 mm
		Max. surface	16 m²

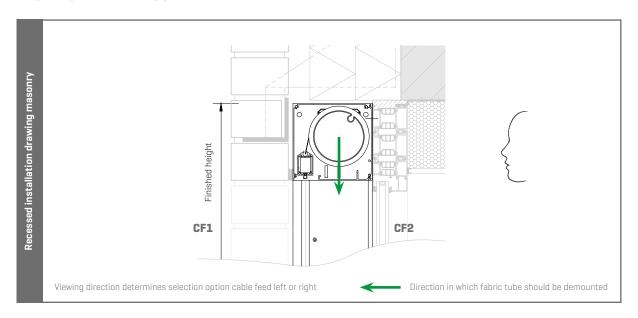


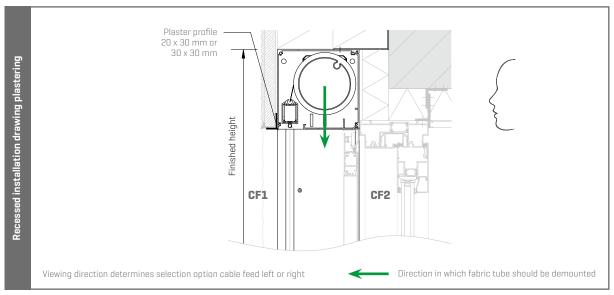
• Coupling is not possible

Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

Installation method 7B (IM 7B): recessed, in front of the window, with fully finished box

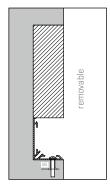
TECHNICAL DRAWINGS

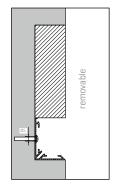


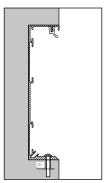


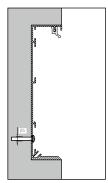
Note:

• When choosing narrow side guiding channels G, the customer must provide something removable below the box so that the fabric tube can be removed from the bottom. [H = min. 680 mm]

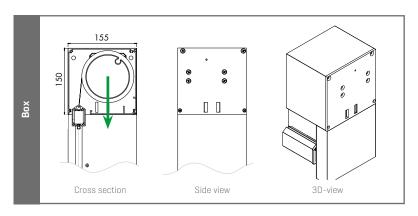


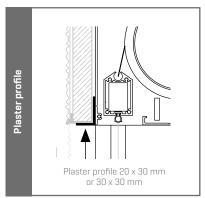


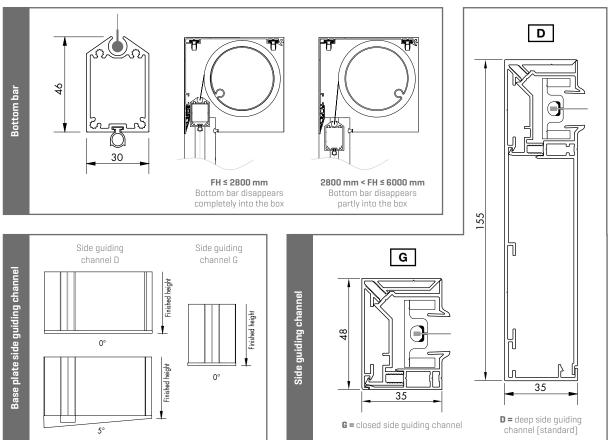


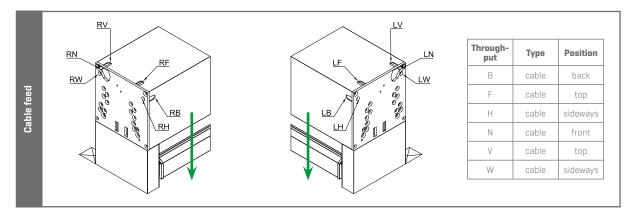










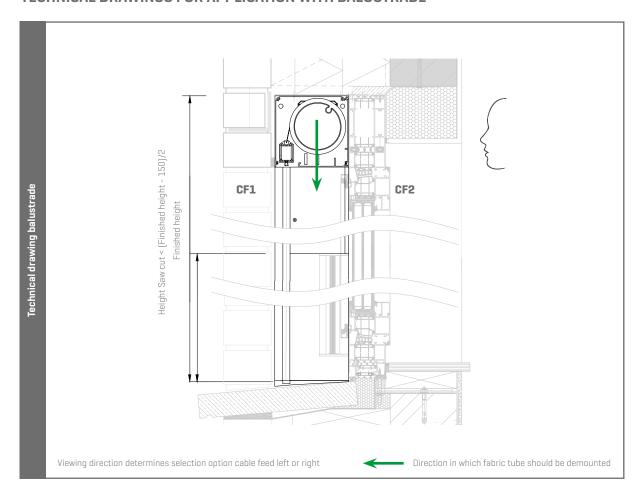


Viewing direction determines selection option cable feed left or right Position window

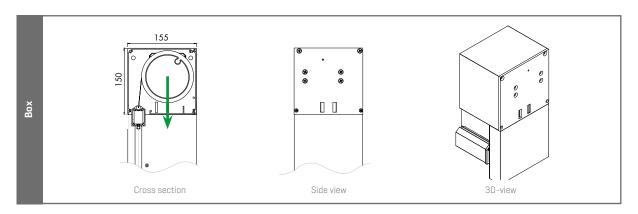


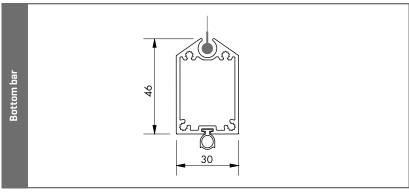
Installation method 7B (IM 7B): recessed, in front of the window, with fully finished box

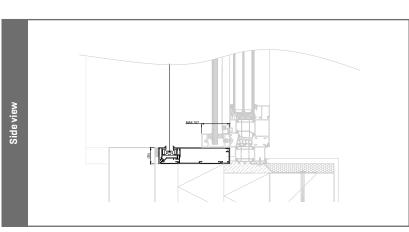
TECHNICAL DRAWINGS FOR APPLICATION WITH BALUSTRADE

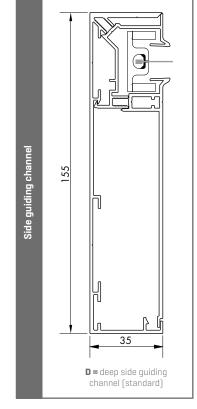


TECHNICAL DRAWINGS FOR APPLICATION WITH BALUSTRADE





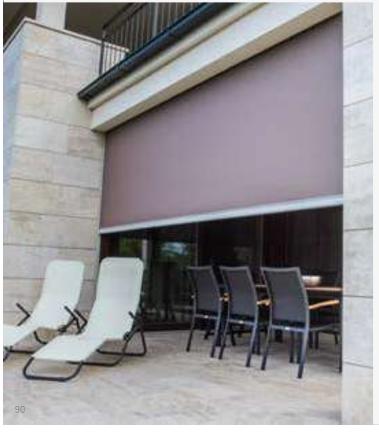


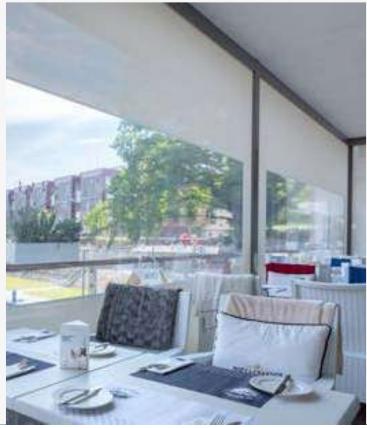


Viewing direction determines selection option cable feed left or right Position window

FIXSCREEN® FREESTANDING







Fixscreen® Freestanding / VERTICAL SUN PROTECTION

FIXSCREEN® 100 SLIM F

Installation method (IM 7A F): Freestanding without any construction behind, with fully finished box

VERTICAL

WINDPROOF



- Fabric close to the terrace covering or balcony
- Multi-functionally applicable
- Fabric tube removable from the bottom





Sinale

TECHNICAL DATA

Design			
Box size (HxD)		150 x 110 mm	
Box extension (wi	idth left and/or right)	500 mm	
Square		✓	
Softline		-	
Bottom bar retrac	ctable	✓	
Recessed fabric t	ube	✓	
Wind resistance			
Wind class EN13561:2004		3	
Guaranteed wind resistance		Up to 60 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residential		✓	
Control	Control		
	Detecto Renson motor Safety First	✓	
	Somfy mechanical motor	✓	
Motorized	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	✓	

Note:

- Box extension not possible in case of side guiding channel D
- Plaster profile is optional

Tip:

If a door handle, handle of a sliding door or a fly screen could possibly prevent the free operation of the fabric, choose installation method 7B [see page 96]. In this case, the box and the side guiding channels are installed inversely. This installation allows the fabric to run away from the freestanding application and a free course is ensured.





IM 7A

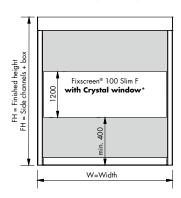
IM 7B

Motorized operation	Applicable fabrics	Dimensions	
	Fibreglass fabrics Sergé / Natté	Min. width	1000 mm
		Min. height	300 mm
		Max. width	6000 mm
		Max. height	2800 mm
Cinala assass		Max. surface	16,8 m²
Single screen	Fibreglass fabric Privacy Tuffscreen mosquito mesh	Min. width	1000 mm
		Max. width	4500 mm
		Min. height	300 mm
		Max. height	2800 mm
		Max. surface	12,6 m²

Note:

- Coupling is not possible
- Application crystal window is possible over the full width of the screen, with a maximum system width of 4500 mm.

FREESTANDING



Crystal window in the full width

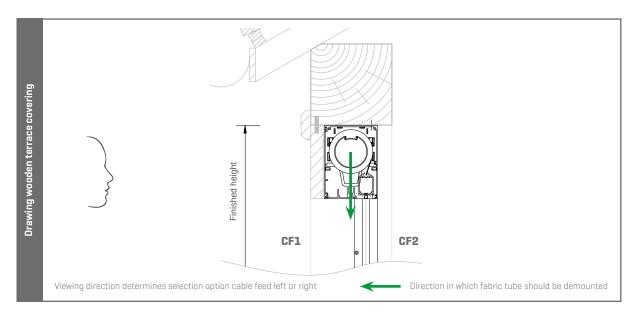
In order to have optimal contact with the exterior, transparent Crystal fabric can be fitted in fibreglass fabric of the Fixscreen 100 Slim F & Fixscreen 150 F. A Crystal window across the width of the screen and 1,200 mm height. Between Crystal windows in the full width and the bottom edges a distance of 400 mm should be maintained.

Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓
2-year warranty on Crystal fabric	✓

FIXSCREEN® 100 SLIM F

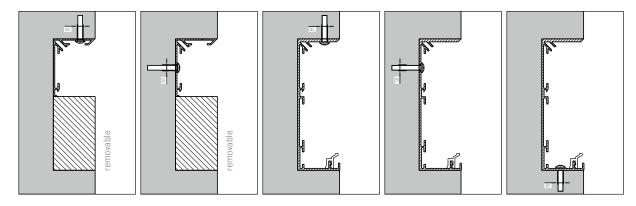
Installation method (IM 7A F): Freestanding without any construction behind, with fully finished box

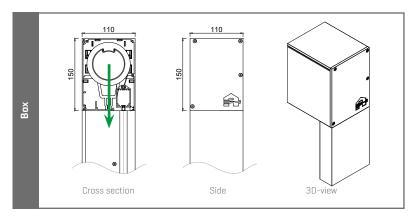
TECHNICAL DRAWINGS

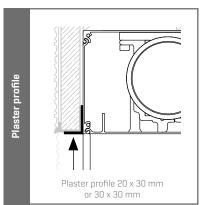


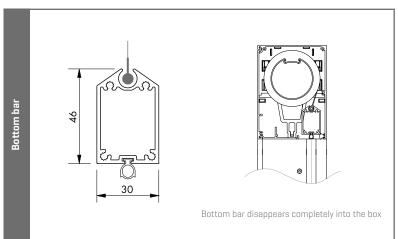
Note:

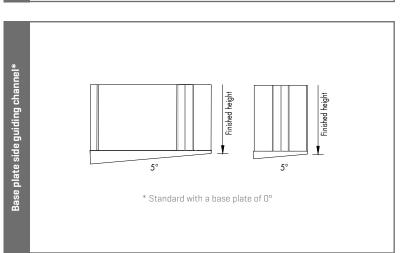
• When choosing the narrow side guiding channel G, the customer must provide something removable below the box to facilitate removing the fabric tube towards the bottom. [H = min. 680 mm]

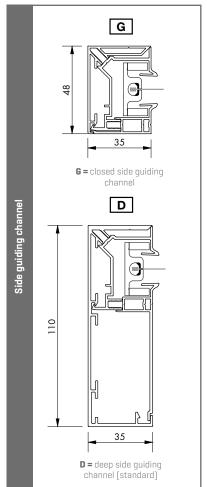


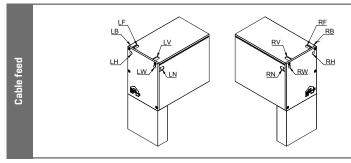












Throughput	Туре	Position
В	cable	back
F	cable	top
Н	cable	sideways
N	cable	front
V	cable	top
W	cable	sideways

Viewing direction determines selection option cable feed left or right



FIXSCREEN® 100 SLIM F

Installation method (IM 7B F): Freestanding without any construction behind, with fully finished box







- Fabric away from the inside terrace covering or balcony
- Multi-functionally applicable
- Fabric tube removable from the bottom





Single

TECHNICAL DATA

Design			
Box size (HxD)		150 x 110 mm	
Box extension (w	idth left and/or right)	500 mm	
Square		✓	
Softline		-	
Bottom bar retrac	ctable	✓	
Recessed fabric t	ube	✓	
Wind resistance			
Wind class EN13561:2004		3	
Guaranteed wind resistance		Up to 60 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residential		✓	
Control			
	Detecto Renson motor Safety First	✓	
	Somfy mechanical motor	✓	
Motorized	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	✓	

Note:

- $\bullet\,$ Box extension not possible in case of side guiding channel D
- Plaster profile is optional

Motorized operation	Applicable fabrics	Dimensions	
	Fibreglass fabrics Sergé / Natté	Min. width	1000 mm
		Min. height	300 mm
		Max. width	6000 mm
		Max. height	2800 mm
Cinala assass		Max. surface	16,8 m²
Single screen	Fibreglass fabric Privacy Tuffscreen mosquito mesh	Min. width	1000 mm
		Max. width	4500 mm
		Min. height	300 mm
		Max. height	2800 mm
		Max. surface	12,6 m²

Note:

- Coupling is not possible
- Application crystal window is possible over the full width of the screen, with a maximum system width of 4500 mm.

FREESTANDING Fixscreen® 100 Slim F with Crystal window* 400 W=Width

Crystal window in the full width

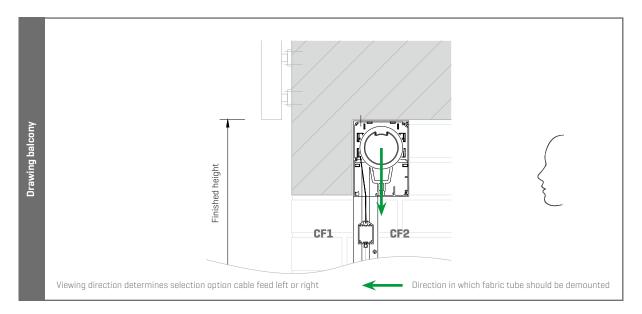
In order to have optimal contact with the exterior, transparent Crystal fabric can be fitted in fibreglass fabric of the Fixscreen 100 Slim F & Fixscreen 150 F. A Crystal window across the width of the screen and 1,200 mm height. Between Crystal windows in the full width and the bottom edges a distance of 400 mm should be maintained.

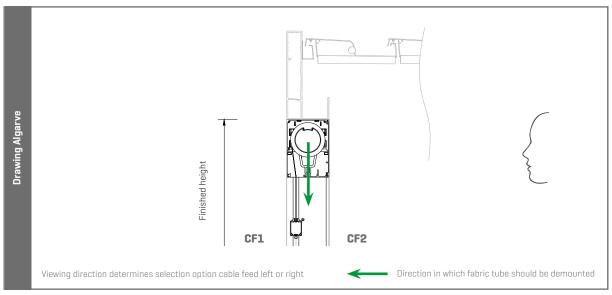
Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓
2-year warranty on Crystal fabric	✓

FIXSCREEN® 100 SLIM F

Installation method (IM 7B F): Freestanding without any construction behind, with fully finished box

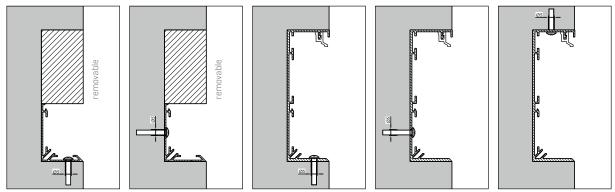
TECHNICAL DRAWINGS

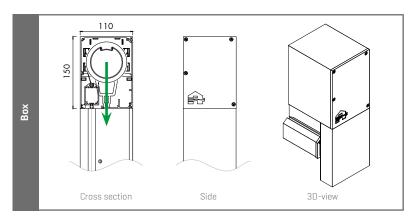


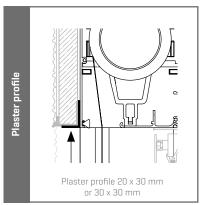


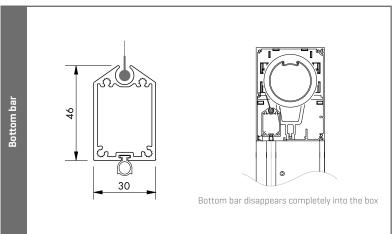
Note

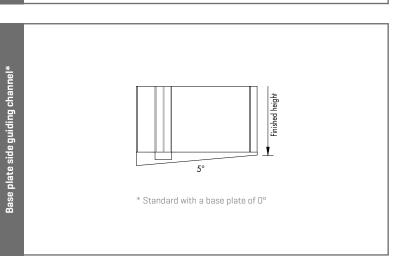
• When choosing the narrow side guiding channel G, the customer must provide something removable below the box to facilitate removing the fabric tube towards the bottom. [H = min. 680 mm]

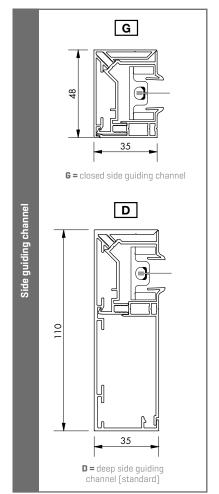


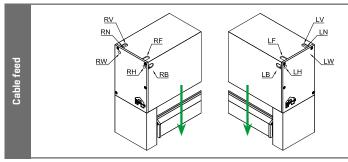












Throughput	Туре	Position
В	cable	back
F	cable	top
Н	cable	sideways
N	cable	front
V	cable	top
W	cable	sideways

Viewing direction determines selection option cable feed left or right



FIXSCREEN® 150 F

Installation method (IM 1 F): Freestanding without any construction behind, with fully finished box









- Suitable for large dimensions
- Discrete and aesthetic integration
- Fabric tube removable from the outside





TECHNICAL DATA

Design			
Box size (HxD)		150 x 155 mm	
Box extension (w	idth left and/or right)	500 mm	
Square		✓	
Softline		✓	
Bottom bar retra	ctable	✓	
Recessed fabric t	rube	✓	
Wind resistance			
Wind class EN13561:2004		3	
Guaranteed wind resistance		Up to 60 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residential		✓	
Control			
	Detecto Renson motor Safety First	✓	
	Somfy mechanical motor	✓	
Motorized	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	✓	

Note:

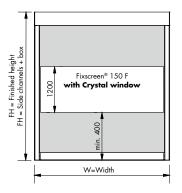
• Mounting recommended with a minimum of 2 persons. Weight: ± 23 kg/m.

Motorized operation	Applicable fabrics	Dimensions	
Single screen	Fibreglass fabrics Tuffscreen mosquito mesh	Min. width	905 mm
		Max. width	6000 mm
		Min. height	300 mm
		Max. height	3000 mm
		Max. surface	18 m²

Note:

- Coupling is not possible
- Above 2800 mm heigth a wind sensor is obligatory

FREESTANDING



Crystal window in the full width

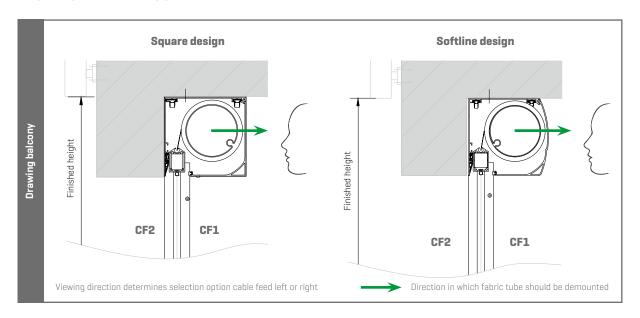
In order to have optimal contact with the exterior, transparent Crystal fabric can be fitted in fibreglass fabric of the Fixscreen 100 Slim F & Fixscreen 150 F. A Crystal window across the width of the screen and 1,200 mm height. Between Crystal windows in the full width and the bottom edges a distance of 400 mm should be maintained.

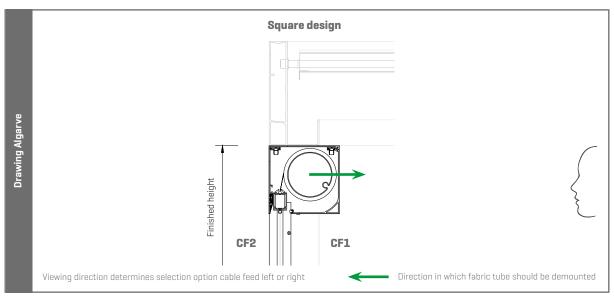
Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓
2-year warranty on Crystal fabric	✓

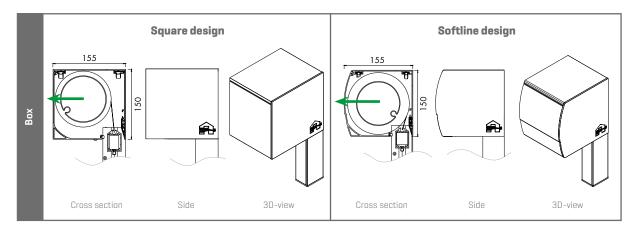
FIXSCREEN® 150 F

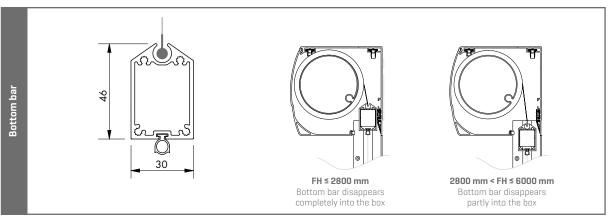
Installation method (IM 1 F): Freestanding without any construction behind, with fully finished box

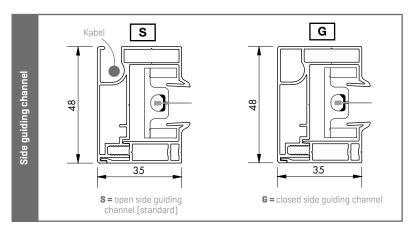
TECHNICAL DRAWINGS

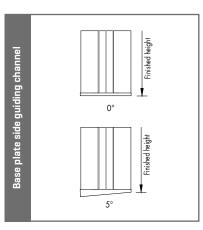


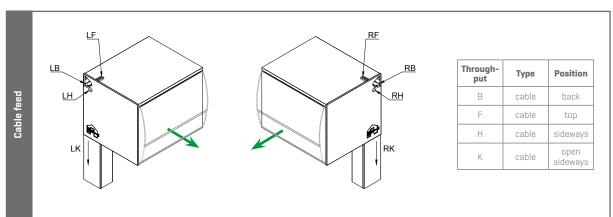












Viewing direction determines selection option cable feed left or right



FIXSCREEN® 150 F

Installation method (IM 7A F): Freestanding without any construction behind, with fully finished box

VERTICAL

WINDPROOF



- Fabric close to the terrace covering or balcony
- Suitable for large dimensions
- Invisible integration
- Fabric tube removable from the bottom





TECHNICAL DATA

Design				
Box size (HxD)		150 x 155 mm		
Box extension (width left and/or right)		500 mm		
Square		✓		
Softline		-		
Bottom bar retractable		✓		
Recessed fabric tube		✓		
Wind resistance				
Wind class EN13561:2004		3		
Guaranteed wind resistance		Up to 60 km/h in closed position		
Application				
New buildings		✓		
Renovation		✓		
Residential		✓		
Non-residential		✓		
Control				
Motorized	Detecto Renson motor Safety First	✓		
	Somfy mechanical motor	✓		
	Somfy, RTS radio-controlled motor	✓		
	Somfy, IO radio-controlled motor	✓		

Note:

- Mounting recommended with a minimum of 2 persons. Weight: ± 23 kg/m.
- Box extension not possible in case of side guiding channel D
- Plaster profile is optional

Tip:

If a door handle, handle of a sliding door or a fly screen could possibly prevent the free operation of the fabric, choose installation method 7B (see page 108). This installation allows the fabric to run away from the freestanding application and a free course is ensured.





Motorized operation	Applicable fabrics	Dime	nsions
Single screen	Fibreglass fabrics Tuffscreen mosquito mesh	Min. width	909 mm
		Max. width	6000 mm
		Min. height	300 mm
		Max. height	3000 mm
		Max. surface	18 m²

Note:

- Coupling is not possible
- Above 2800 mm heigth a wind sensor is obligatory

FREESTANDING Fixscreen® 150 F with Crystal window 400 W=Width

Crystal window in the full width

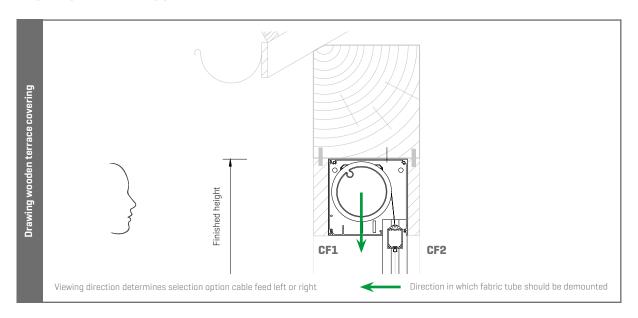
In order to have optimal contact with the exterior, transparent Crystal fabric can be fitted in fibreglass fabric of the Fixscreen 100 Slim F & Fixscreen 150 F. A Crystal window across the width of the screen and 1,200 mm height. Between Crystal windows in the full width and the bottom edges a distance of 400 mm should be maintained.

Technology				
Fixscreen-technology	\checkmark			
Smooth-technology	✓			
Connect&Go-technology	✓			
Certificates				
Declaration of Performance (DoP)	DOP-2015SC00002			
Wind tunnel test report	N°113-25809			
Durability test report	WTCB N°651 XE823 CAR4139			
Warranty				
10-year warranty on coating of aluminium profiles	\checkmark			
7-year warranty on Detecto Renson motor Safety First	✓			
5-year warranty on Fixscreen-technology	✓			
5-year warranty for electronic controls [motor & automation]	✓			
5-year product warranty	\checkmark			
5-year warranty on fabric collection	✓			
5-year warranty on gloss level	✓			
2-year warranty on Crystal fabric	✓			

FIXSCREEN® 150 F

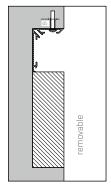
Installation method (IM 7A F): Freestanding without any construction behind, with fully finished box

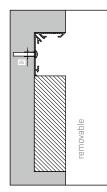
TECHNICAL DRAWINGS

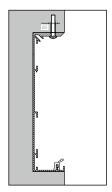


Note:

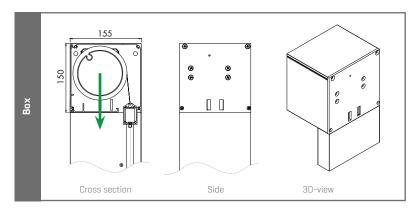
• When choosing narrow side guiding channels G, the customer must provide something removable below the box so that the fabric tube can be removed from the bottom. [H = min. 680 mm]

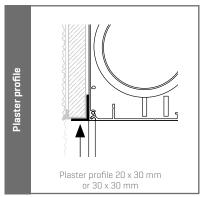


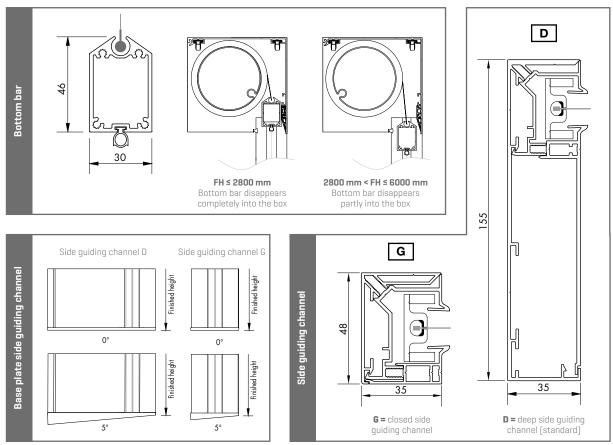


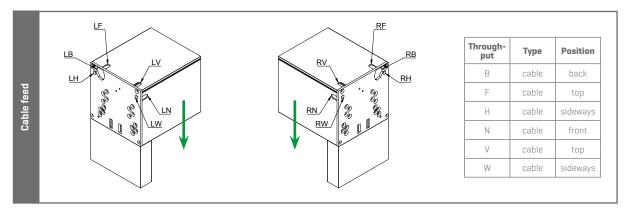












Viewing direction determines selection option cable feed left or right



FIXSCREEN® 150 F

Installation method (IM 7B F): Freestanding without any construction behind, with fully finished box

VERTICAL

WINDPROOF





- Fabric away from the inside terrace covering or balcony, perfect to combine with mosquito mesh, door handle, ...
- Suitable for large dimensions
- Invisible integration
- Fabric tube removable from the front





TECHNICAL DATA

Design				
Box size [HxD]		150 x 155 mm		
Box extension (w	idth left and/or right)	500 mm		
Square		✓		
Softline		-		
Bottom bar retra	ctable	✓		
Recessed fabric t	tube	✓		
Wind resistance				
Wind class EN13561:2004		3		
Guaranteed wind resistance		Up to 60 km/h in closed position		
Application				
New buildings		✓		
Renovation		✓		
Residential		✓		
Non-residential		✓		
Control				
	Detecto Renson motor Safety First	✓		
	Somfy mechanical motor	✓		
Motorized	Somfy, RTS radio-controlled motor	✓		
	Somfy, IO radio-controlled motor	✓		

Note:

- Mounting recommended with a minimum of 2 persons. Weight: \pm 23 kg/m.
- Box extension not possible in case of side quiding channel D
- Plaster profile is optional

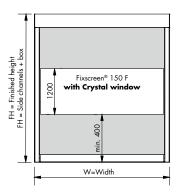
DIMENSIONS

Motorized operation	Applicable fabrics	Dimensions	
	Fibreglass fabrics Tuffscreen mosquito mesh	Min. width	909 mm
		Max. width	6000 mm
Single screen		Min. height	300 mm
		Max. height	3000 mm
		Max. surface	18 m²

Note:

- Coupling is not possible
- Above 2800 mm heigth a wind sensor is obligatory

FREESTANDING



Crystal window in the full width

In order to have optimal contact with the exterior, transparent Crystal fabric can be fitted in fibreglass fabric of the Fixscreen 100 Slim F & Fixscreen 150 F. A Crystal window across the width of the screen and 1,200 mm height. Between Crystal windows in the full width and the bottom edges a distance of 400 mm should be maintained.

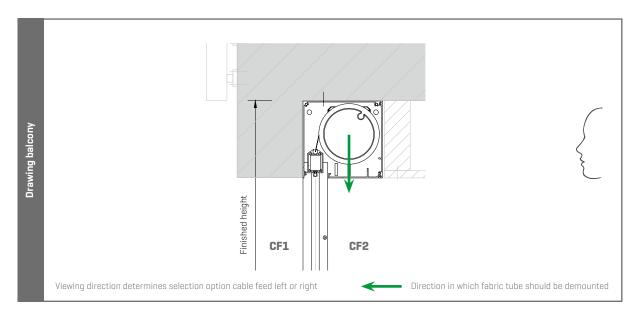
DURABILITY

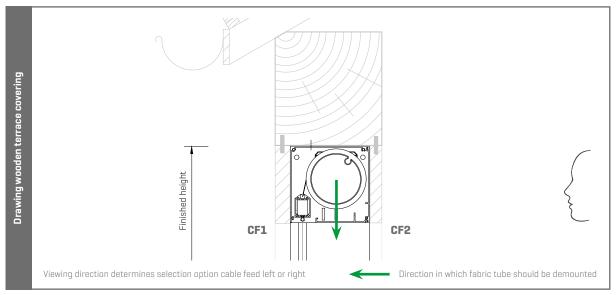
Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N°113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓
2-year warranty on Crystal fabric	✓

FIXSCREEN® 150 F

Installation method (IM 7B F): Freestanding without any construction behind, with fully finished box

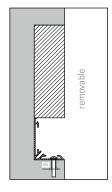
TECHNICAL DRAWINGS

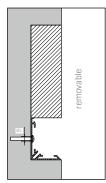


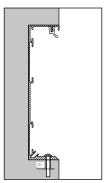


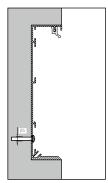
Note

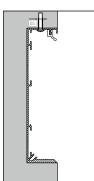
• When choosing narrow side guiding channels G, the customer must provide something removable below the box so that the fabric tube can be removed from the bottom. [H = min. 680 mm]



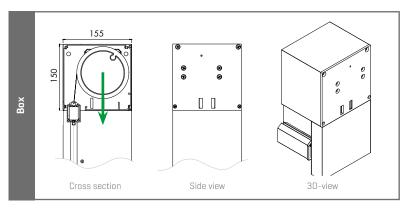


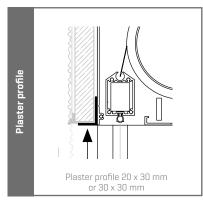


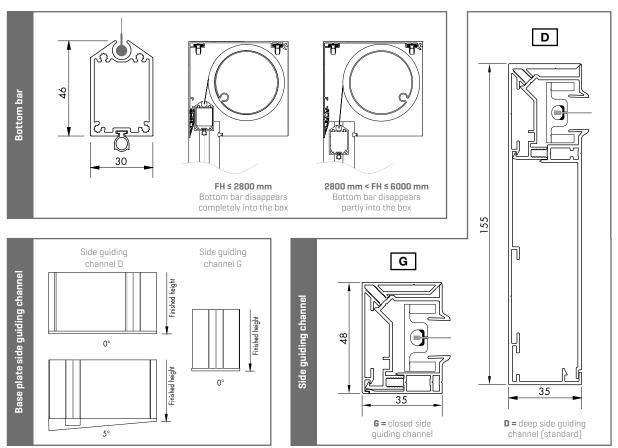


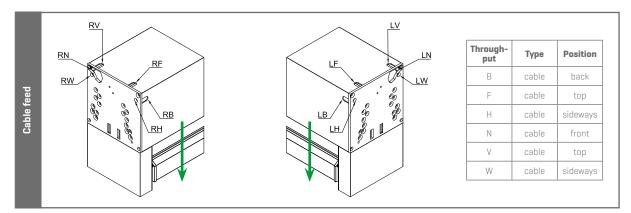


TECHNICAL DRAWINGS









Viewing direction determines selection option cable feed left or right



Direction in which fabric tube should be demounted

FIXSCREEN® MONO AK FVO FIXVENT® MONO AK/UT FVO







PRODUCTS

Fixscreen® Mono AK - Fixvent® Mono AK/UT = 10 / VERTICAL SUN PROTECTION

FIXSCREEN® MONO AK EVO

Installation method 4 (IM 4): recessed, on top of the window, with fully finished box







RECESSED



- Acoustic insulation
- Discrete and aesthetic integration
- Fabric tube removable from the inside







TECHNICAL DATA

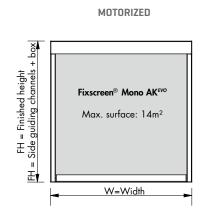
	Small	Medium	Lormo	V Larma	VV Larra	
	Small	меашт	Large	X-Large	XX-Large	
Design						
Box size [HxD]	132 x 167 mm	132 x 197 mm	132 x 227 mm	132 x 257 mm	132 x 287 mn	
Compatible window thickness	50-94 mm	95-124 mm	125 - 154 mm	155-184 mm	185-215 mm	
Wind resistance						
Wind class EN13561:2004			3			
Guaranteed wind resistance		Up to	130 km/h in closed po	sition		
Application						
New buildings			✓			
Renovation			✓			
Residential			✓			
Non-residential			✓			
Control						
	Detec	cto Renson motor Safe	ty First		/	
Motorized		Somfy mechanical motor			/	
MOTOLIZEO	Somf	y, RTS radio-controlled	l motor		/	
	Som	fy, IO radio-controlled	motor		/	
Comfort						
Acoustic insulation $D_{\text{new}}\left(C;C_{t_r}\right)$ [rolled-up fabric]	47(-1;4)dB	50(-1;-3)dB	50(-1;-3)dB	50(-1;-3)dB	52(-2;-5)dB	
Technical data						
Thermal; interrupted			yes			
U-Value (W/m²K)	0,92	0,53	0,54	0,54	0,55	
Insect repellent		yes				

Note:

- Detecto Renson motor Safety First: not in case of coupled systems with only 1 motor
- Somfy IO motor: only in case of FH ≤ 3000 mm.

DIMENSIONS

Motorized operation	Applicable fabrics	Dimensions		
		Min. width	825 mm	
	Fibreglass fabrics	Max. width	4000	mm
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. height	300	mm
	Tuffscreen mosquito mesh	Max. height	3500	l mm
Single screen		Max. surface	14	m²
alligle screen		Min. width	1000	l mm
	Blackout fibreglass fabrics	Max. width	2000	l mm
	Satiné 21154 Black out polyester fabric Soltis	Min. height	300 mm	
	Opaque B92	Max. height	2700 mm	
		Max. surface	5,4 m²	
		Min. width	1620 mm	
		Max. width	6000 mm	
	Fibreglass fabrics Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. height	300 mm	
		Max. height	1 motor 3000 mm	2 motors 3500 mm
Coupled screen		Max. surface	1 motor 18 m²	2 motors 21 m²
		Min. width	2000 mm	
	Blackout fibreglass fabrics	Max. width	4000 mm	
	Satiné 21154 Black out polyester fabric Soltis	Min. height	300 mm	
	Opaque B92	Max. height	2700 mm	
		Max. surface	10,8 m²	





FIXSCREEN® MONO AK EVO

Installation method 4 (IM 4): recessed, on top of the window, with fully finished box

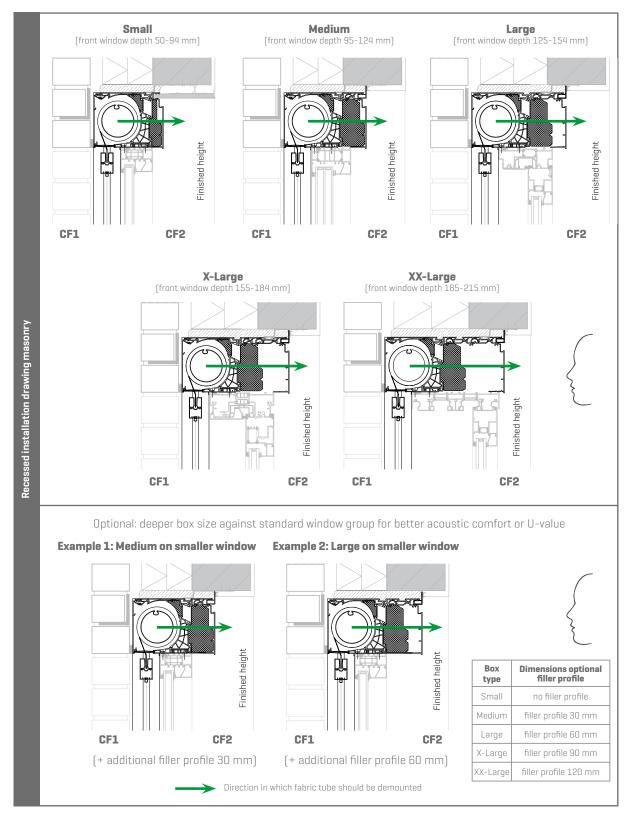
DURABILITY

Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	\checkmark
Click&Safe-technologie	\checkmark
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Wind tunnel test report	N° 113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	\checkmark
7-year warranty on Fixscreen-technology	\checkmark
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

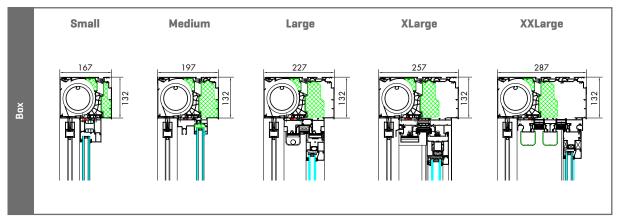
FIXSCREEN® MONO AK EVO

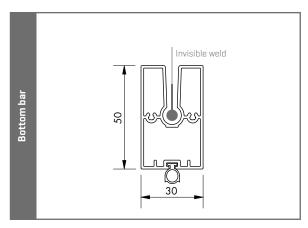
Installation method 4 (IM 4): recessed, on top of the window, with fully finished box

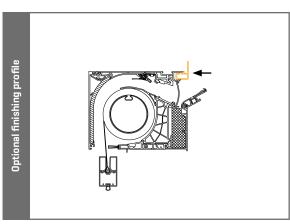
TECHNICAL DRAWINGS

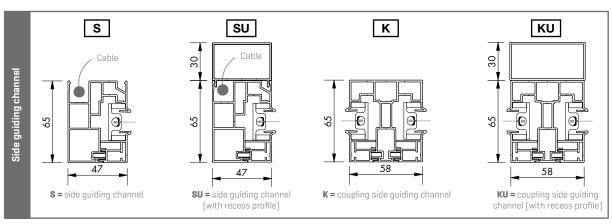


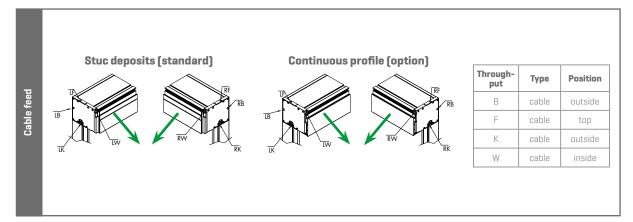
TECHNICAL DRAWINGS











Viewing direction determines selection option cable feed left or right



Direction in which fabric tube should be demounted

FIXVENT® MONO AK EVO

Installation method 4 (IM 4): recessed, on top of the window, with fully finished box





STANDARD (SLIDING) WINDOW

RECESSED



- Sun protection, acoustic and ventilation in one
- Discrete and aesthetic integration
- Fabric tube removable from the inside







igle



TECHNICAL DATA

		Small	Medium	Large	X-Large	XX-Large		
Sun protectio	n							
Design								
Box size (HxD]	132 x 167 mm	132 x 197 mm	132 x 227 mm	132 x 257 mm	132 x 287 mr		
Compatible w	indow thickness	50-94 mm	95-124 mm	125 - 154 mm	155-184 mm	185-215 mm		
Wind resistar	nce							
Wind class EN	113561:2004			3				
Guaranteed w	ind resistance		Up to 3	130 km/h in closed բ	osition			
Application								
New buildings				✓				
Renovation				✓				
Residential				✓				
Non-resident	ial			✓				
Control								
		Detect	o Renson motor Sa	fety First		/		
		Si	omfy mechanical m	otor		/		
Motorized		Somfy	, RTS radio-controll	ed motor		/		
		Somf	y, IO radio-controlle	d motor		/		
Ventilation								
Airflow								
	Fixvent® Mono AK ^{EVO}			18324 mm²/m				
Equivalent area	Fixvent® Mono AK ^{EVO} ULTRA			4836 mm²/m				
4.04	Fixvent® Mono AK EVO EXTREME		2800 mm²/m					
	Fixvent® Mono AK ^{EVO}			12,8 l/s/m				
Q at 1 Pa	Fixvent® Mono AK ^{EVO} ULTRA		3,7 l/s/m					
	Fixvent® Mono AK EVO EXTREME		2,1 l/s/m					
Comfort								
Acoustic insu	lation D _{new} (C;C _{tr}) in open position (rolled	-up fabric)						
	Fixvent® Mono AK ^{EVO}	33(0;-2)dB	35(0;-3)dB	36(-1;-4)dB	37[-1;-4]dB	40[-1;-4] dl		
	Fixvent® Mono AK ^{EVO} ULTRA	n.a.	38(0;-2)dB	40(-1;-4)dB	43(-1;-4)dB	45(-1;-5)dl		
	Fixvent® Mono AK EVO EXTREME	n.a.	43(0;-3)dB	43(0;-3)dB	46(-1;-4)dB	48(-2;-5)dE		
Technical dat	а							
Self-regulatin	g	at 2 Pa						
Thermal; inte	rrupted			yes				
U-Value (W/m	n ² K]							
Fixvent® Mo	no AK ^{EVO}	1,47	0,98	0,80	0,77	0,72		
Fixvent® Mo	no AK ^{EVO} ULTRA	n.a.	0,70	0,55	0,46	0,41		
Fixvent® Mo	no AK ^{EVO} EXTREME	n.a.	0,62	0,47	0,38	0,32		
Leakage airflo	ow in closed position		< 15% at 50 Pa					
Insect repelle	nt		yes					

Note

 $\bullet\,$ Narrow box not available for the Fixvent Mono AK $^{\text{EVO}}$ ULTRA/EXTREME.

FIXVENT® MONO AK EVO

Installation method 4 (IM 4): recessed, on top of the window, with fully finished box

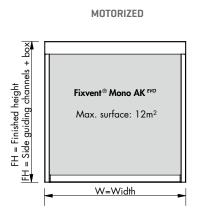
DURABILITY

Technology			
Fixscreen-technology	✓		
Smooth-technology	✓		
Connect&Go-technology	✓		
Click&Safe-technologie	✓		
Certificates			
Declaration of Performance [DoP]	DOP-2015SC00002		
Wind tunnel test report	N° 113-25809		
Durability test report	WTCB N°651 XE823 CAR4139		
Warranty			
10-year warranty on coating of aluminium profiles	✓		
7-year warranty on Fixscreen-technology	✓		
7-year warranty on Detecto Renson motor Safety First	✓		
5-year warranty for electronic controls [motor & automation]	✓		
5-year product warranty	✓		
5-year warranty on fabric collection	✓		
5-year warranty on gloss level	✓		



DIMENSIONS

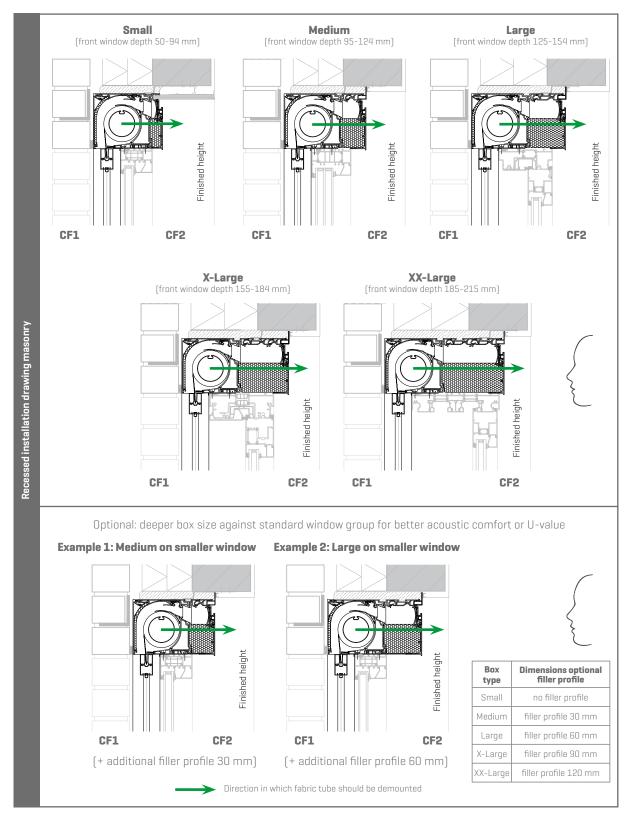
Motorized operation	Applicable fabrics	Dimensio	ns
		Min. width	675 mm
	Fibreglass fabrics	Max. width	4000 mm
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. height	300 mm
	Tuffscreen mosquito mesh	Max. height	3000 mm
Cinalo assess		Max. surface	12 m²
Single screen		Min. width	1000 mm
	Blackout fibreglass fabrics	Max. width	2000 mm
	Satiné 21154 Black out polyester fabric Soltis Opaque B92	Min. height	300 mm
		Max. height	2700 mm
		Max. surface	5,4 m²
	Fibreglass fabrics Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. width	1320 mm
		Max. width	6000 mm
		Min. height	300 mm
		Max. height	3000 mm
Coupled screen (2-part with		Max. surface	18 m²
2 motors)		Min. width	2000 mm
	Blackout fibreglass fabrics	Max. width	4000 mm
	Satiné 21154 Black out polyester fabric Soltis	Min. height	300 mm
	Opaque B92	Max. height	2700 mm
		Max. surface	10,8 m²



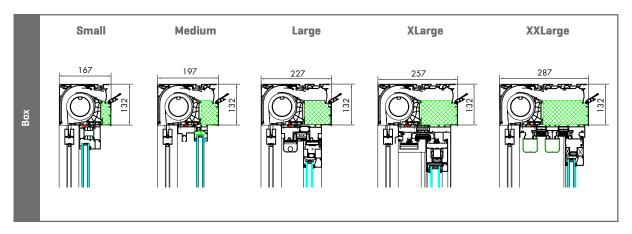
FIXVENT® MONO AK EVO

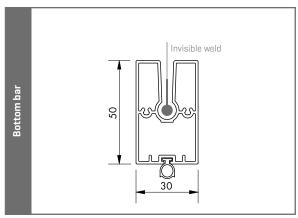
Installation method 4 (IM 4): recessed, on top of the window, with fully finished box

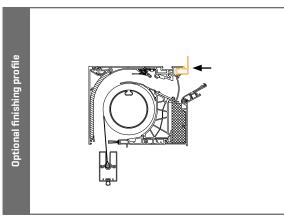
TECHNICAL DRAWINGS

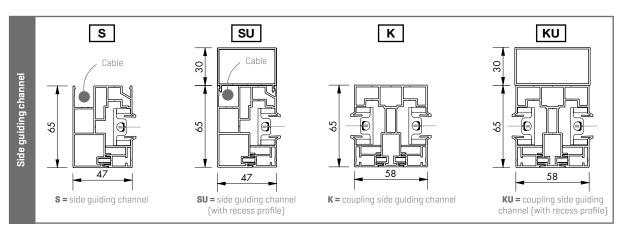


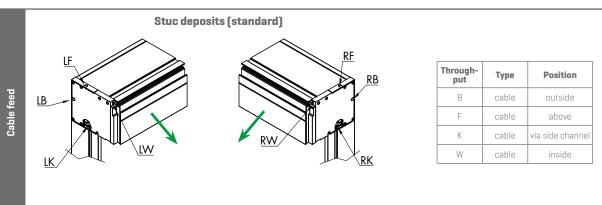
TECHNICAL DRAWINGS











Viewing direction determines selection option cable feed left or right



Direction in which fabric tube should be demounted

Note:

- $\bullet~$ The Fixvent Mono AK $^{\mbox{\tiny EVO}}$ ULTRA/EXTREME is always delivered inclusive of filler profile.
- Narrow box is not applicable to the Fixvent ULTRA/EXTREME.

FIXVENT® MONO AK FVO

Installation method 4 (IM 4): recessed, on top of the window, with fully finished box

VERTICAL

WINDPROOF

STANDARD (SLIDING) WINDOW

RECESSED



- Suitable for non-residential construction
- Sun protection, acoustic and ventilation in one
- Discrete and aesthetic integration
- Fabric tube removable from the inside







Single

Couple



TECHNICAL DATA

		Small	Medium	Large	X-Large	XX-Large	
Sun protection							
Design							
Box size [HxD]		132 x 167 mm	132 x 197 mm	132 x 227 mm	132 x 257 mm	132 x 287 mn	
Compatible window	v thickness	50-94 mm	95-124 mm	125 - 154 mm	155-184 mm	185-215 mm	
Wind resistance							
Wind class EN1356	51:2004			3			
Guaranteed wind re	esistance		Up to 1	.30 km/h in closed	position		
Application							
New buildings				✓			
Renovation				/			
Residential				-			
Non-residential				/			
Control							
		Detecto	Renson motor Sa	fety First		/	
		So	mfy mechanical m	otor		/	
Motorized		Somfy,	Somfy, RTS radio-controlled motor			✓	
		Somfy	Somfy, IO radio-controlled motor			✓	
	Ventilation						
	Airflow						
	Fixvent® Mono UT EVO			19724 mm²/m			
Equivalent area	Fixvent® Mono UT EVO ULTRA		4836 mm²/m				
0 . 1 0			15,5 l/s/m				
Q at 1 Pa			3,7 l/s/m				
Comfort							
Acoustic insulation	D_{new} (C;C _{tr}) in open position (rolled-up	fabric)					
Fixvent® Mono U1	r EVO	33[0;-2]dB	35(0;-3)dB	36(-1;-4)dB	37(-1;-4)dB	40(-1;-4) dE	
Fixvent® Mono U1	r ^{evo} ULTRA	n.a.	38(0;-2)dB	40(-1;-4)dB	43(-1;-4)dB	45(-1;-5)dE	
Technical data							
Self-regulating			at 10 Pa				
Thermal; interrupted			yes				
U-Value (W/m²K)							
Fixvent® Mono U1	EVO	1,47	0,98	0,80	0,77	0,72	
Fixvent® Mono U1	T EVO ULTRA	n.a.	0,70	0,55	0,46	0,41	
Leakage airflow in (closed position		< 15% at 50 Pa				
Insect repellent			yes				

Note:

 \bullet Narrow box not available for the Fixvent Mono $\mathsf{UT}^{\mathsf{EVO}}$ ULTRA.

FIXVENT® MONO UT EVO

Installation method 4 (IM 4): recessed, on top of the window, with fully finished box

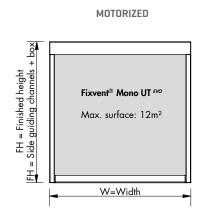
DURABILITY

Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Click&Safe-technologie	✓
Certificates	
Declaration of Performance [DoP]	DOP-2015SC00002
Wind tunnel test report	N° 113-25809
Durability test report	WTCB N°651 XE823 CAR4139
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	/



DIMENSIONS

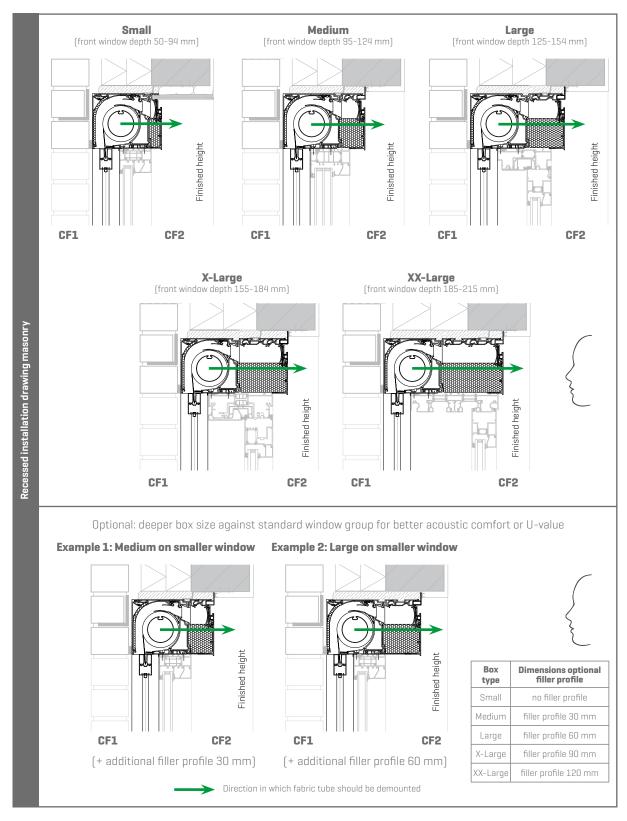
Motorized operation	Applicable fabrics	Dimensio	ns
		Min. width	675 mm
	Fibreglass fabrics	Max. width	4000 mm
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. height	300 mm
	Tuffscreen mosquito mesh	Max. height	3000 mm
Cinalo assess		Max. surface	12 m²
Single screen		Min. width	1000 mm
	Blackout fibreglass fabrics	Max. width	2000 mm
	Satiné 21154 Black out polyester fabric Soltis Opaque B92	Min. height	300 mm
		Max. height	2700 mm
		Max. surface	5,4 m²
	Fibreglass fabrics Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. width	1320 mm
		Max. width	6000 mm
		Min. height	300 mm
		Max. height	3000 mm
Coupled screen (2-part with		Max. surface	18 m²
2 motors)		Min. width	2000 mm
	Blackout fibreglass fabrics	Max. width	4000 mm
	Satiné 21154 Black out polyester fabric Soltis	Min. height	300 mm
	Opaque B92	Max. height	2700 mm
		Max. surface	10,8 m²



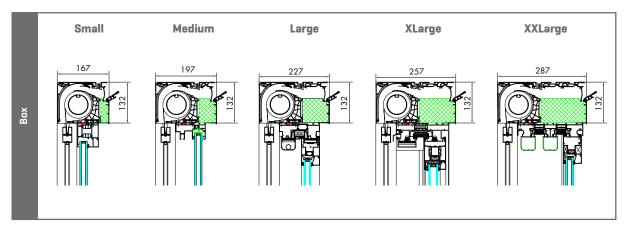
FIXVENT® MONO UT EVO

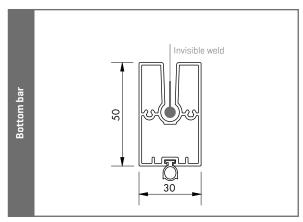
Installation method 4 (IM 4): recessed, on top of the window, with fully finished box

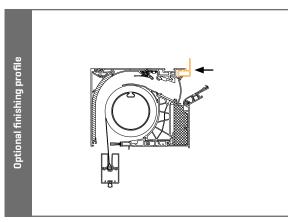
TECHNICAL DRAWINGS

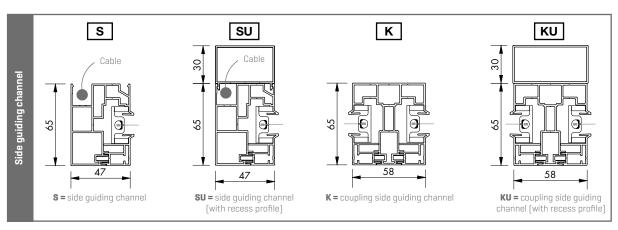


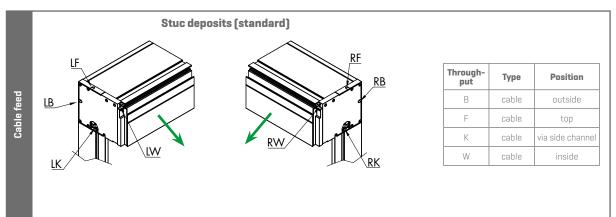
TECHNICAL DRAWINGS











Viewing direction determines selection option cable feed left or right



Direction in which fabric tube should be demounted

Note:

- The Fixvent Mono UT^{EVO} ULTRA is always delivered inclusive of filler profile.
- Narrow box is not applicable for the ULTRA version.

FIXSCREEN® MINIMAL (F)



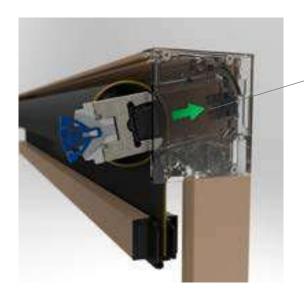




FIXSCREEN® MINIMAL (F)

Renson® is a pioneer in windproof sun screens against winds of up to 130 km/h, and its new product the Fixscreen Minimal raises the bar even higher. The ultimate aim is to conceal the screen box and side guiding channels to the maximum extent during renovations or retrofitting. To ensure this, each and every part and detail of the Fixscreen sun screen was studied in depth: box, side guiding channels, fabric roller tube, dimensions, screen tension, etc. The result of these efforts being: minimal dimensions that enable a nearly invisible installation.





COMPLETELY RENEWED CONNECT&GO-TECHNOLOGY

To facilitate a quick, easy and safe [de]mounting of the fabric set. By integrating the <code>Click&Safe</code> technology, the fabric set can now be clicked into the head box without screws so that the installer has his hands free to safely complete the installation.







EASE OF INSTALLATION COMES FIRST

The head box profile, for example, has a detail at the rear with various applications. A hook profile to easily mount the head box or a fill profile for a beautifully finishing. For even more convenient installation, the connection between the head box and the side guiding channel is achieved with separate mounting pins and the bottom bar can easily be clicked from the fabric. This limits the weight during installation.



EXTREME WIND WARRANTY UP TILL 130 KM/H

Next to the high wind warranty in closed position for standard applications, there is a high warranty up till 100 km/h for freestanding applications. Ideally suitable for sun protection in balconies and terraces.

FIXSCREEN® MINIMAL

Installation method 1 (IM 1): surface-mounted, in front of the window, with fully finished box



WINDPROOF

STANDARD (SLIDING) WINDOW

SURFACE MOUNTED



Small



Medium

- Minimal impact on architecture
- Minimalistic design with eye for detail
- Fabric set removable from the outside





TECHNICAL DATA

		Small	Medium		
Design					
Box size (HxD)		100 x 90 mm	120 x 110 mm		
Square		✓			
Bottom bar rectractable		-			
Base plate side guiding channel		Lacquered aluminium 0° or 5°			
Wind resistance					
Wind class EN13561:2004		3			
Guaranteed wind resistance		Up to 130 km/h in closed position			
Control					
	Detecto Renson Motor Safety First	✓			
	Somfy mechanical motor	-			
Motorized	Somfy, RTS radio-controlled motor	-			
	Somfy, io radio-controlled motor	✓			
	Somfy, Sonesse* io radio-controlled motor	V	′		

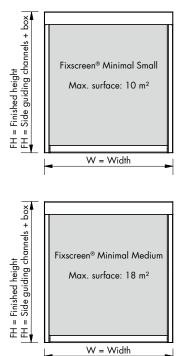
^{*} For inside application only

DIMENSIONS

		Small		Medium	
Single screen					
Fibreglass fabric Sergé / Natté / Privacy	Min. width Somfy io	900 mm		900 mm	
	Min. width Detecto	670 mm		670 mm	
	Max. width	4000 mm	3200 mm	5000 mm	4500 mm
	Max. height	2500 mm	3000 mm	3500 mm	4000 mm
	Max. surface	10 m²	9,6 m²	17,5 m²	18 m²
Satiné 21154 blackout fibreglass fabric Soltis Opaque B92 blackout polyester fabric	Min. width Somfy io	900 mm		900 mm	
	Min. width Detecto	670 mm		670 mm	
	Max. width	3200 mm		4000 mm	
	Max. height	2500 mm		4000 mm	
	Max. surface	8 m²		16 m²	

Please note

- Screens are always motorised.
- 2 screens can be connected together (box next to box). Dimensions of a single screen apply.
- Medium box supplementary fixation in the middle from 3600 mm width onwards



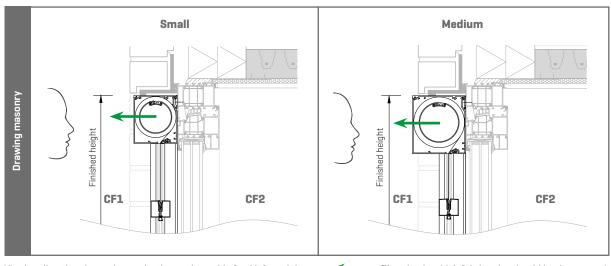
DURABILITY

Technology		
Fixscreen-technology	✓	
Smooth-technology	✓	
Renewed Connect&Go-technology	✓	
Click&Safe-technology	✓	
Certificates		
Declaration of Performance (DoP)	DOP-2015SC00006	
Wind tunnel test report	WTT17-003	
Warranty		
10-year warranty on coating of aluminium profiles	✓	
7-year warranty on Fixscreen-technology	✓	
7-year warranty on Detecto Renson motor Safety First	✓	
5-year warranty for electronic controls [motor & automation]	✓	
5-year product warranty	✓	
5-year warranty on fabric collection	✓	
5-year warranty on gloss level	✓	

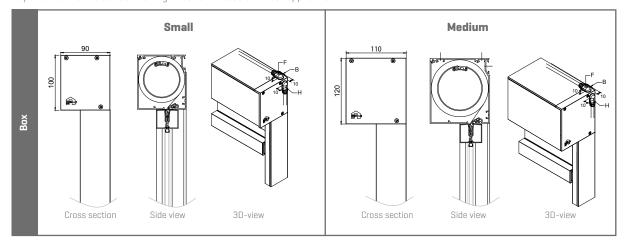
FIXSCREEN® MINIMAL

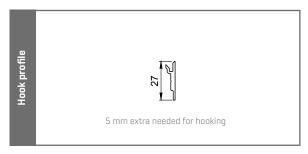
Installation method 1 (IM 1): surface-mounted, in front of the window, with fully finished box

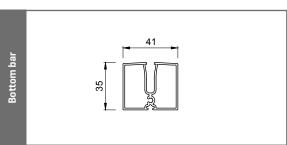
TECHNICAL DRAWINGS



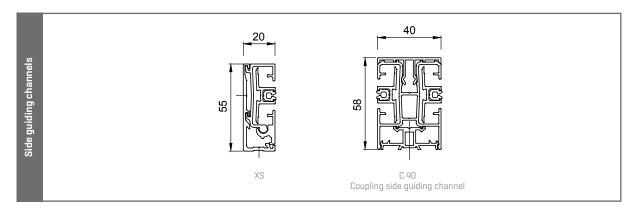
Viewing direction determines selection option cable feed left or right Pay attention to the correct viewing direction in case of indoor application.

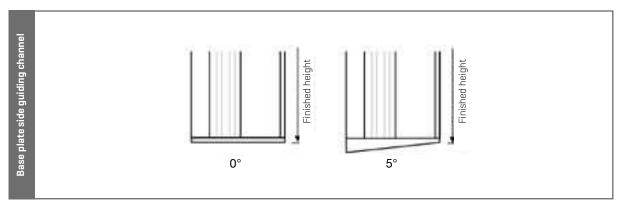


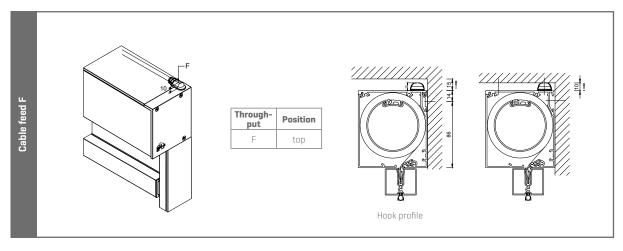


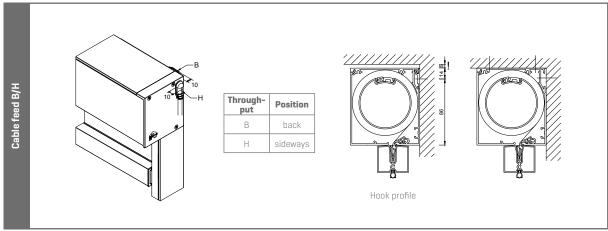


TECHNICAL DRAWINGS









FIXSCREEN® MINIMAL F

Installation method 1 (IM 1 F): Freestanding without any construction behind, with fully finished box







Small



Medium

- Discreet and aesthetic integration
- High wind warranty up till 100 km/h
- Fabric set removable from the outside





Freestanding

TECHNICAL DATA

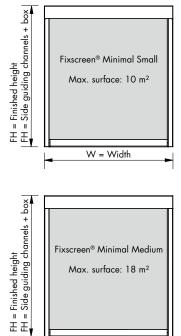
		Small	Medium		
Design					
Box size (HxD)		100 x 90 mm	120 x 110 mm		
Square		✓			
Bottom bar rectractable		-			
Base plate side guiding channel		Lacquered aluminium 0° or 5°			
Wind resistance					
Wind class EN13561:2004		3			
Guaranteed wind resistance		Up to 100 km/h in closed position			
Control					
	Detecto Renson Motor Safety First	✓			
	Somfy mechanical motor	-			
Motorized	Somfy, RTS radio-controlled motor	-			
	Somfy, io radio-controlled motor	✓			
	Somfy, Sonesse io radio-controlled motor	-			

DIMENSIONS

		Small		Medium	
Single screen					
Fibreglass fabric Sergé / Natté / Privacy	Min. width Somfy io	900 mm		900 mm	
	Min. width Detecto	670 mm		670 mm	
	Max. width	4000 mm	3200 mm	5000 mm	4500 mm
	Max. height	2500 mm	3000 mm	3500 mm	4000 mm
	Max. surface	10 m²	9,6 m²	17,5 m²	18 m²

Please note

- Screens are always motorised.
- Medium box supplementary fixation in the middle from 3600 mm width onwards



W = Width

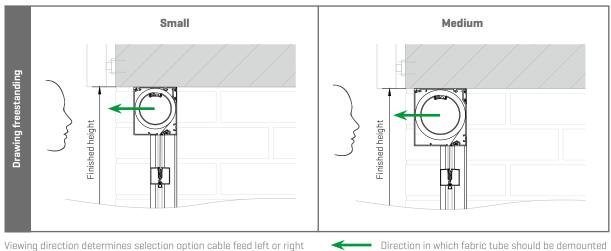
DURABILITY

Technology		
Fixscreen-technology	✓	
Smooth-technology	✓	
Renewed Connect&Go-technology	✓	
Click&Safe-technology	\checkmark	
Certificates		
Declaration of Performance (DoP)	DOP-2015SC00006	
Wind tunnel test report	WTT17-003	
Warranty		
10-year warranty on coating of aluminium profiles	\checkmark	
7-year warranty on Detecto Renson motor Safety First	✓	
5-year warranty on Fixscreen-technology	\checkmark	
5-year warranty for electronic controls [motor & automation]	✓	
5-year product warranty	✓	
5-year warranty on fabric collection	✓	
5-year warranty on gloss level	✓	

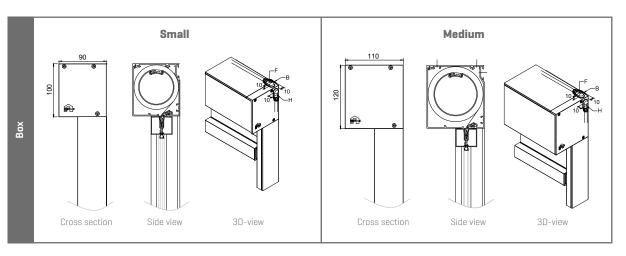
FIXSCREEN® MINIMAL F

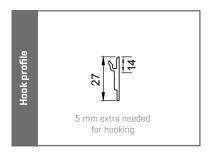
Installation method 1 (IM 1 F): Freestanding without any construction behind, with fully finished box

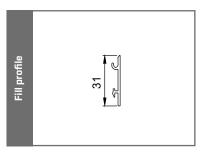
TECHNICAL DRAWINGS

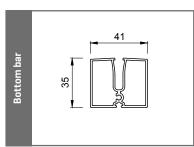


Viewing direction determines selection option cable feed left or right

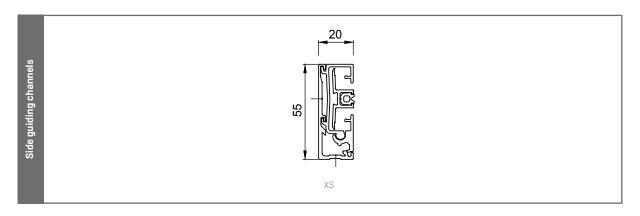


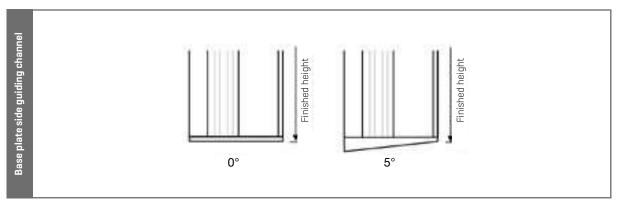


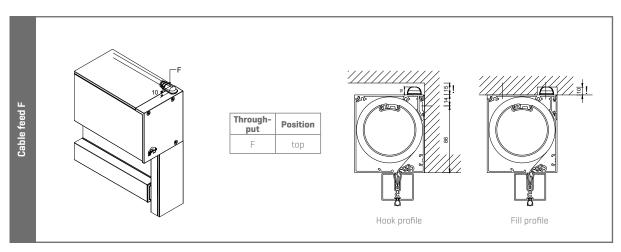


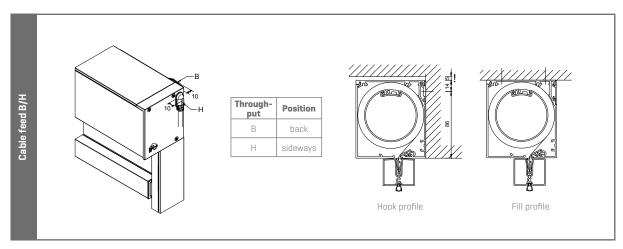


TECHNICAL DRAWINGS









PANOVISTA® (MAX)



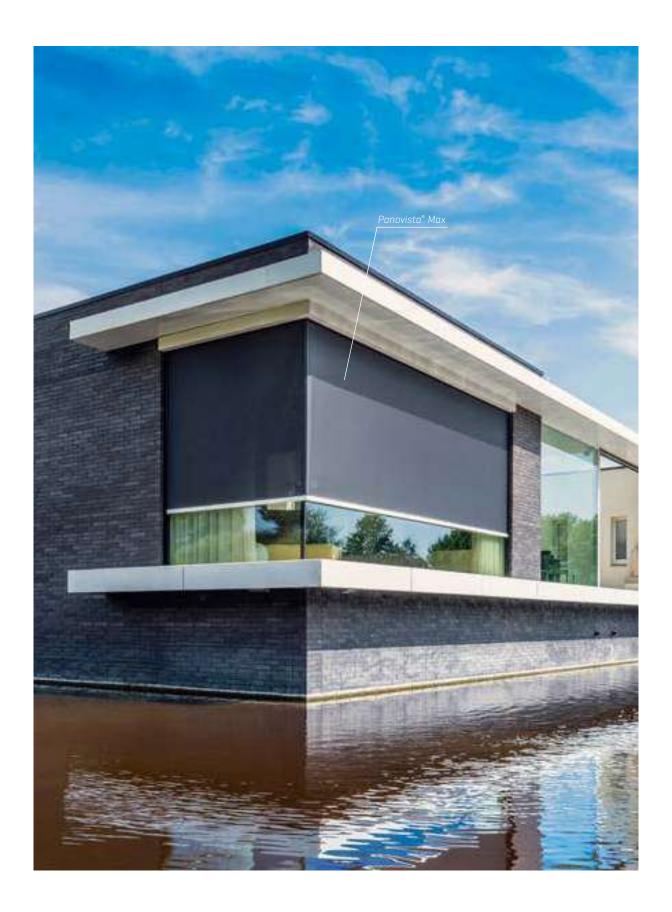






PANOVISTA®

The first sun protection for glass-on-glass corner windows



The Panovista is the first sun protection for glass-on-glass corner windows, perfectly in line with the modern architecture of large glass surfaces and minimalist design.

1. KEEP THE PANORAMIC VIEW

Panovista [Max] is an ideal solution to glass-on-glass windows. After all, there are no aluminium profiles or cables visible in the corner, so that the panoramic view is fully preserved.

2. INVISIBLE INTEGRATION

The Panovista [Max] was designed so that both the box and side guiding channels can be fully aesthetically concealed in the façade. In case of Panovista, the bottom bar is also fully retractable.

3. APPLICABLE TO LARGE GLASS SURFACES

Panovista [Max] is developed to provide large glass surfaces with fabric sun protection as perfect fit to the current trends in the market. The Panovista can cover a total surface of 22.4 $\,\mathrm{m^2}$ and the Panovista Max can even go up to 30 $\,\mathrm{m^2}$.

4. HIGH WIND GUARANTEE

The patented Fixscreen-technology always guarantees taut fabrics. The zipper is optimally attached to the fabric and remains firmly in the side quiding channels. Even at wind speeds up to 90 km/h [Panovista Max].

5. CONNECT&GO-TECHNOLOGY

The various types of motors that are applicable, have been fitted with a Connect&Go-technology. This patented technology guarantees a quick and fast mounting of the fabric tube. In this way, not only the mounting but also the dismounting is particularly efficient.

6. DURABLE GUIDANCE OF THE FABRIC

Increase the comfort thanks to the Smooth-technology. This wear-resistant, patented layer ensures a flowing, durable and low-noise operation of the zipper in the side guiding channels.

7. VAST COLLECTION OF FABRICS AND POWDER COATING COLOURS

Panovista [Max] can be perfectly aligned with the architecture of the building due to the broad range of fabrics and powder coating colours.

CHOOSE FROM TWO DIFFERENT SYSTEMS

Depending on your wishes and expectations, you can choose between two different versions of the Panovista. Both systems are perfect for glass-on-glass corner windows. The difference lies in the coupling angle. With the **Panovista** there is an opening between two parts of the fabric. In the **Panavista Max**, an aesthetic zipper is integrated into the corner thanks to the larger box. This way, the corner is fully closed, which guarantees improved wind resistance up to 90 km/h. Larger dimensions are possible because of the larger box As the corner is fully closed, the Panovista Max is fully insect repellent.



Panovista®



Panovista® Max

PANOVISTA®

Installation method 7 (IM 7): surface-mounted or recessed, in front of the window, with fully finished box

present on the corner.

VERTICAL



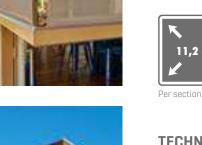
CORNER WINDOW















Panovista is perfectly suitable for new buildings and

renovation projects and can be aesthetically integrated into glass-on-glass corner windows. There is no zipper



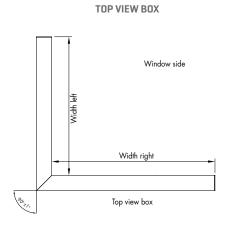
TECHNICAL DATA

Design		
Box size [HxD]		150 x 110 mm
Box extension (В]	-
Square		✓
Bottom bar retr	ractable	✓
Recessed fabric	tube	✓
Wind resistance	е	
Wind tunnel tes	t certificate	WTT14-001
Guaranteed win	d resistance	Up to 37 km/h in closed position
Application		
New buildings		✓
Renovation		✓
Residential		✓
Non-residentia		✓
Control		
	Detecto Renson motor (without obstacle detection)	✓
Motorized	Somfy mechanical motor	✓
	Somfy, RTS radio-controlled motor	✓
	Somfy, IO radio-controlled motor	✓



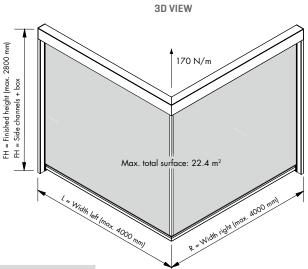
DIMENSIONS

Motorized operation	Applicable fabrics	Dimensions		
		Min. width	650 mm section width without motor	
			800 mm section width with motor	
		Max. width	4000 mm per section	
Panovista	Fibreglass fabrics		1000 mm	
	Tubilos	Max. height	2800 mm	
		Max. surface	11,2 m² per section	
			22,4 m² total	
		Min. width	650 mm section width without motor	
			800 mm section width with motor	
Panovista	Eibraglaga	Max. width	650 mm section width without motor 800 mm section width with motor 4000 mm per section 1000 mm 2800 mm 11,2 m² per section 22,4 m² total 650 mm section width without motor	
coupled with Fixscreen 100 Slim IM 7A	Fibreglass fabrics	Total width coupled	6000 mm	
		Min. height	1000 mm	
		Max. height	2800 mm	



Note:

- Coupling is only possible with Fixscreen 100 Slim IM 7A
- A wind sensor is mandatory
- Only applicable to outside angle
- The necessary bearing strength of the structure is 170 N/m box
- Training in mounting is mandatory for the installer



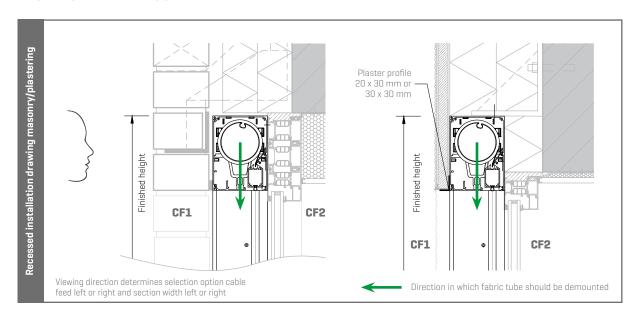
DURABILITY

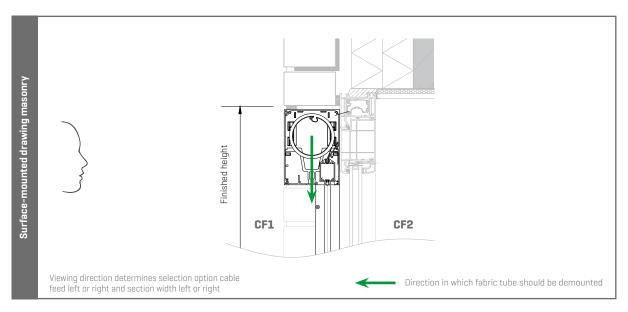
Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00004
Wind tunnel test report	WTT14-001
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
7-year warranty on Detecto Renson motor Safety First	✓
5-year warranty for electronic controls (motor & automation)	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

PANOVISTA®

Installation method 7 (IM 7): surface-mounted or recessed, in front of the window, with fully finished box

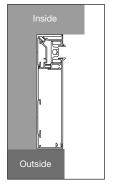
TECHNICAL DRAWINGS

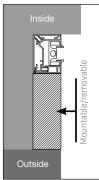




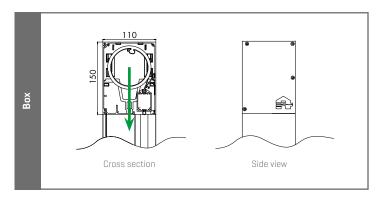
Note:

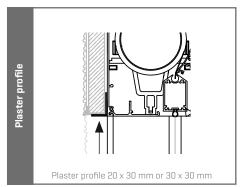
 When choosing narrow side guiding channels G, the customer must provide something removable below the box so that the fabric tube can be removed from the bottom. [H = min. 680 mm]

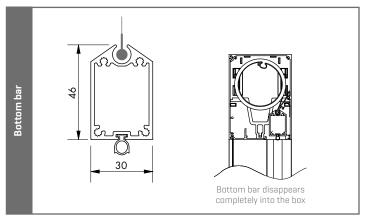


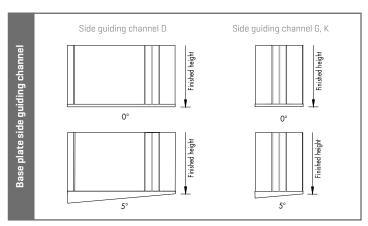


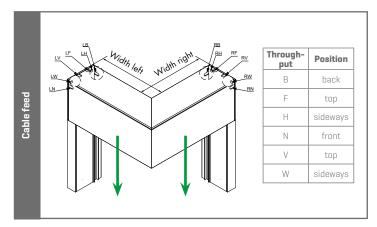
TECHNICAL DRAWINGS



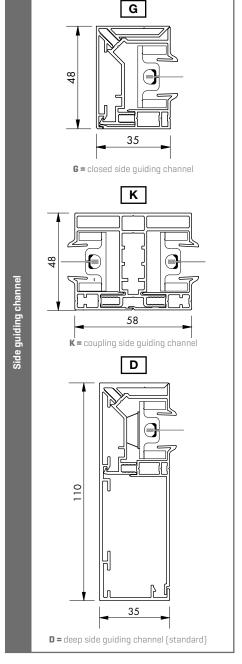








Viewing direction determines selection option cable feed left or right and section width left or right





Direction in which fabric tube should be demounted

PANOVISTA® MAX

Installation method 7 (IM 7): Recessed, in front of the window, with fully finished box

VERTICAL

WINDPROOF

CORNER WINDOW

RECESSED







Panovista is perfectly suitable for new buildings projects and can be integrated into glass-on-glass corner windows. There is a zipper present on the corner that ensures improved wind resistance.







TECHNICAL DATA

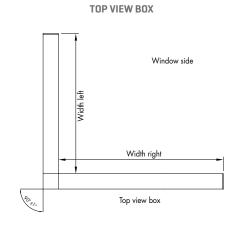
Design				
Box size (HxD)		150 x 155 mm		
Box extension		-		
Square		✓		
Bottom bar partia	ally retractable	✓		
Recessed fabric t	ube	✓		
Wind resistance				
Wind tunnel test	certificate	WTT15-001		
Guaranteed wind	resistance	Up to 90 km/h in closed position		
Application				
New buildings		✓		
Renovation		-		
Residential		✓		
Non-residential		✓		
Control				
	Detecto Renson motor Safety First	-		
	Somfy mechanical motor	✓		
Motorized	Somfy, RTS radio-controlled motor	✓		
	Somfy, IO radio-controlled motor	✓		

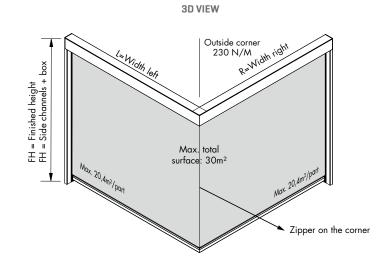
DIMENSIONS

Motorized operation	Applicable fabrics	Dimensions			
			650 mm section width without motor		
		Min. width			
		Marriage	650 mm section width without motor 850 mm section width with motor 6000 mm per section 12000 mm total 300 mm 3400 mm		
Democratic Man	Fibreglass fa-	Max. width			
Panovista Max	brics	Min. height	650 mm section width without motor 850 mm section width with motor 6000 mm per section 12000 mm total 300 mm		
		Max. height	3400 mm		
			20,4 m² per section		
		Max. surface	30 m² total		

Note:

- Coupling is not possible
- A wind sensor is mandatory
- Always secure box and bracket to the construction above
- Only applicable to outside angle
- $\bullet\,$ The necessary bearing strength of the structure is 230 N/m box
- Training in mounting is mandatory for the installer





DURABILITY

Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00004
Wind tunnel test report	WTT15-001
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Panovista Max-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty [provided a mandatory maintenance contract]	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

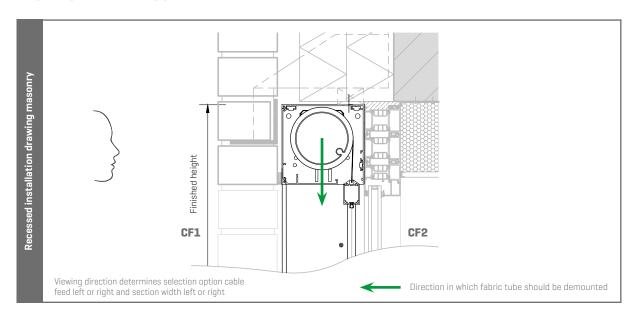
ZIPPER COLORS

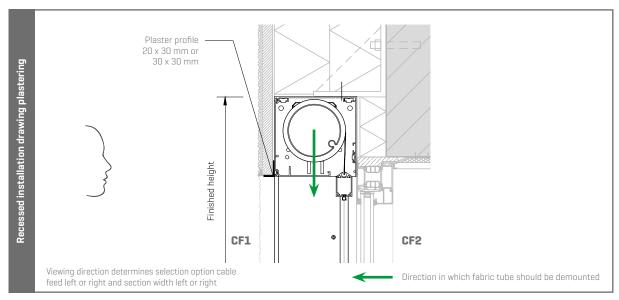
Ref.	Color	
02	White	
20	Linen	
32	Beige	
07	Pearl grey	
31	Grey green	
01	Grey	
06	Bronze	
30	Charcoal	

PANOVISTA® MAX

Installation method 7 (IM 7): Recessed, in front of the window, with fully finished box

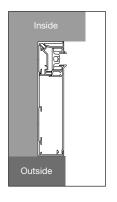
TECHNICAL DRAWINGS

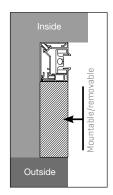




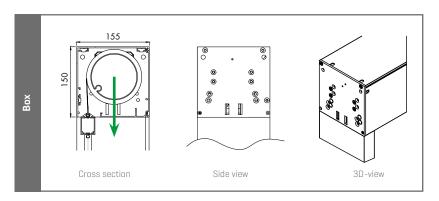
Note

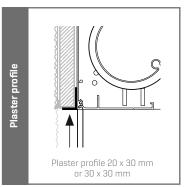
 When choosing narrow side guiding channels G, the customer must provide something removable below the box so that the fabric tube can be removed from the bottom. [H = min. 680 mm]



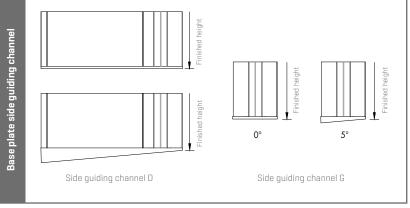


TECHNICAL DRAWINGS





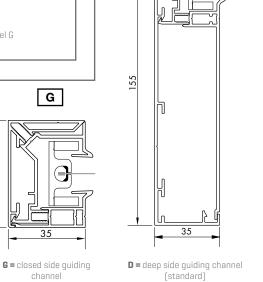
D

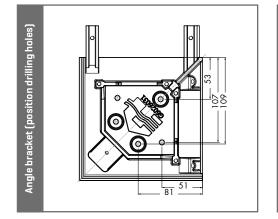


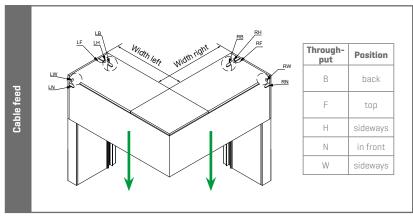
Side guiding channel

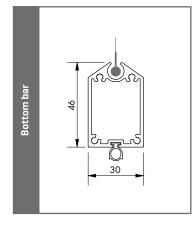
48

channel









Viewing direction determines selection option cable feed left or right and section width left or right

Direction in which fabric tube should be demounted

SLIDEFIX®







SLIDEFIX®

Sideways sliding windproof screen



Slidefix responds to the evolution towards 'Invisible Architecture'. This new development, with which the screen slides open sideways, is the ideal, windproof solution for large openings, sliding windows and angle solutions.

1. SIDEWAY MOVEMENT FOLLOWS THE SLIDING WINDOW

The sideways open sliding sun protection follows the sideways movement of the sliding window. A logical movement that results in a more practical situation. The sideways movement also increases the flexibility of using the room and the need for sun protection.

2. INVISIBLE INTEGRATION

The Slidefix was designed so that both the box and channels can be fully aesthetically concealed in the façade. The side bar is also fully retractable

3. DURABLE DESIGN

The Slidefix was designed so that easy maintenance and perfect water drainage remain quaranteed.

4. VARIOUS CONFIGURATIONS POSSIBLE

A single Slidefix can provide a window surface of up to 12 m² with sun protection. For wider window surfaces, you can opt for a double system that can provide a total window width of 8 m with sun protection. Slidefix is also an ideal solution for inside and outside corners.

5. WIND GUARANTEE UP TO 90KM/H

The patented Fixscreen-technology always guarantees taut fabrics. The zipper is optimally attached to the fabric and remains firmly in the side quiding channels. Even in case of high wind speeds up to $90 \, \text{km/h}$.

6. CONNECT&GO-TECHNOLOGY

The various types of motors that are applicable have been fitted with a Connect&Go-technology. This patented technology guarantees a quick and fast mounting of the fabric tube package in this way, not only the mounting but also the dismounting is particularly efficient.

7. DURABLE GUIDANCE OF THE FABRIC

Increase the comfort thanks to the Smooth-technology. This wear-resistant, patented layer ensures a smooth, durable and silent movement of the zipper in the side quiding channels.

8. VAST COLLECTION OF FABRICS AND POWDER COATING COLOURS

Slidefix can be perfectly aligned with the architecture of the building because of the broad range of fabrics and powder coating colours.

VARIOUS CONFIGURATIONS ARE POSSIBLE



Single system



Double system



Angle solution (outside corner)



Angle solution (inside corner)

SLIDEFIX®

Recessed, in front of the window, with fully finished box

VERTICAL

WINDPROOF

SLIDING OR CORNER WINDOW

RECESSED



Slidefix is ideal for new buildings and/or major renovations. The sun protection follows the logical movement of the sliding window and offers flexible passageway to outside.









TECHNICAL DATA

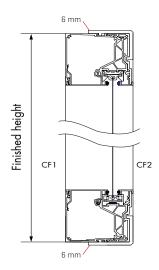
Design			
Box size (BxD)		150 x 110 mm	
Channel size (HxD)		100 x 110 mm	
Box extension		-	
Square		✓	
Softline		-	
Side bar retracta	able	✓	
Recessed fabric	tube	✓	
Wind resistance			
Wind class EN13	3561:2004	3	
Guaranteed wind	d resistance	Up to 90 km/h in closed position	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residential		✓	
Control			
Soltis Horizon 86 / Soltis Perform 92, Satiné 21154, Soltis Opaque B92			
	Detecto Renson motor Safety First	-	
	Somfy mechanical motor	✓	
Motorized Somfy radio- controlled motor		✓	
Somfy, IO radio-controlled motor		✓	
Sergé, Natté, Tuffscreen			
Motorized	Somfy Orea WT- electronic motor	✓	
MUTUITZEU	Somfy Orea radio- controlled motor	✓	

Note:

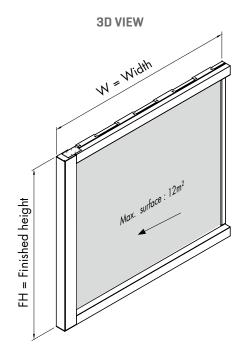
- Plaster profile is optional
- Guiding profile is optional

DIMENSIONS SINGLE SYSTEM

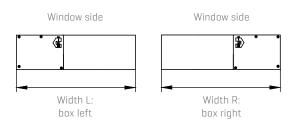
Motorized operation	Applicable fabrics		Dimensions
		Min. width	1000 mm
	Polyester fabric	Max. width	4000 mm
	Soltis Horizon 86 / Soltis Perform 92	Min. height	850 mm
		Max. height	3000 mm
		Max. surface	12 m²
Single system	Fibreglass fabrics Sergé / Natté	Min. width	1000 mm
	Blackout fibreglass	Max. width	3000 mm
	21154 Black out polyester fabric Soltis Opaque B92	Min. height	850 mm
		Max. height	3000 mm
	Tuffscreen mosquito mesh	Max. surface	9 m²

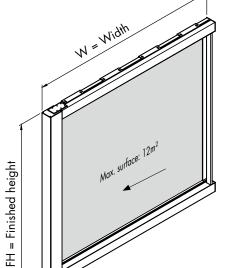


- Motorisation depends on fabric type
- The motor is always located at the top
- Do note the built-in dimensions (see technical drawings)
- Training in mounting is mandatory for the installer



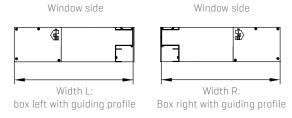
Single system without guiding profile





3D VIEW

Single system with guiding profile



The optional guiding profile allows for the side bar to disappear into the cavity when the Slidefix is closed. At the same time, a neat finish of the cavity is obtained with the guiding profile.

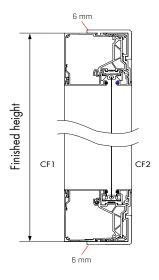




Recessed, in front of the window, with fully finished box

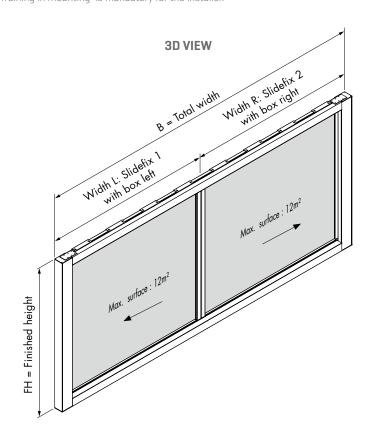
DOUBLE SYSTEM DIMENSIONS

Motorized operation	Applicable fabrics		Dimensions
		Min. width	1000 mm / section
	Polyester fabric	Max. width	4000 mm / section
	Soltis Horizon 86 / Soltis Perform	Min. height	850 mm
	92	Max. height	3000 mm
	Fibreglass fabrics Sergé / Natté Blackout fibreglass fabrics Satiné 21154 Black out polyester fabric Soltis Opaque 892	Max. surface	12 m² / section
Double system		Min. width	1000 mm / section
		Max. width	3000 mm / section
		Min. height	850 mm
		Max. height	3000 mm
	Tuffscreen mosquito mesh	Max. surface	9 m² / section



Note

- Motorisation depends on fabric type
- For a double system, the same restrictions in dimensions per section apply as for a single system.
- If the total width is ≤ 7300 mm, the guiding channels consist of 1 part. If the total width is > 7300 mm, the guiding channels consist of 2 parts.
- The motor is always located at the top.
- Do note the built-in dimensions (see technical drawings).
- Training in mounting is mandatory for the installer.

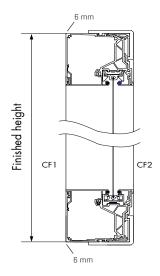


Width L: Slidefix 1 Width R: Slidefix 2 with box left with box right

Total width

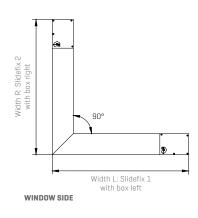
ANGLE SOLUTION DIMENSIONS

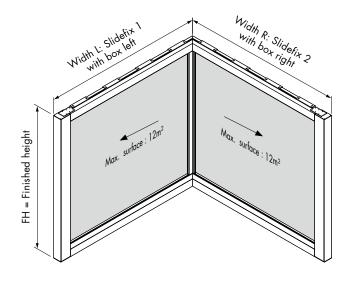
Motorized operation	Applicable fabrics		Dimensions
	Polyester fabric	Min. width	1000 mm / section
		Max. width	4000 mm / section
	Soltis Horizon 86 / Soltis Perform	Min. height	850 mm
	92 Fibreglass fabrics	Max. height	3000 mm
		Max. surface	12 m² / section
Angle solution		Min. width	1000 mm / section
		Max. width	3000 mm / section
		Min. height	850 mm
		Max. height	3000 mm
	Tuffscreen mosquito mesh	Max. surface	9 m² / section



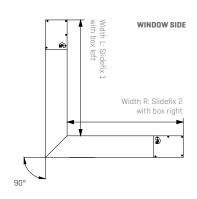
- Motorisation depends on fabric type.
- For an angle solution, the same restrictions in dimensions per section apply as for a
- The motor is always located at the top.
- Both inside and outside angle possible.
- Do note the built-in dimensions (see technical drawings).
- Training in mounting is mandatory for the installer.

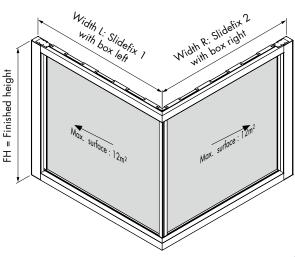
INSIDE CORNER





OUTSIDE CORNER







Recessed, in front of the window, with fully finished box

DURABILITY

Technology	
Fixscreen-technology	✓
Smooth-technology	✓
Connect&Go-technology	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00004
Wind tunnel test report	-
Durability test report	-
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

MAINTENANCE SLIDEFIX

Maintenance is also very easy. The cover profile is easily clicked open via which dirt and dust can simply be vacuumed or rinsed away. Watch the YouTube video: https://youtu.be/r5LFyBbd4jl



Sand, leaves and branches never interfere with the operation



The cover profile is easily clicked open.



Dirt is easily washed away and discharged

WATER DISCHARGE

In case of Slidefix, efficient water drainage is taken in to account from the start. The water is immediately and invisibly drained via the standard slotted holes to an aquadrain or gravel bed or via an optional drain pipe to the sewer

- Via slots in the bottom guide to the aquadrain or gravel bed (standard).
- Via connection drain pipe (optional). Connection with leaf grill included, hole diameter 40 mm to be provided self.



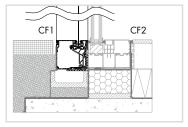
Aquadrain



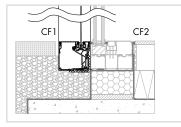
Gravel her



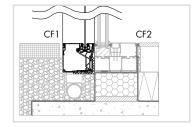
Drain pipe



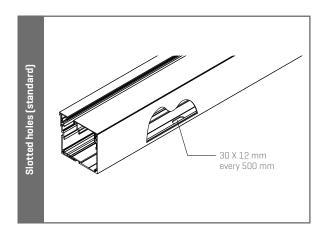
Drain via slotted holes (standard) to aquadrain.

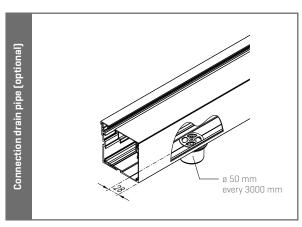


Drain via slotted holes (standard) to gravel bed.



Drain via connection drain pipe [optional].

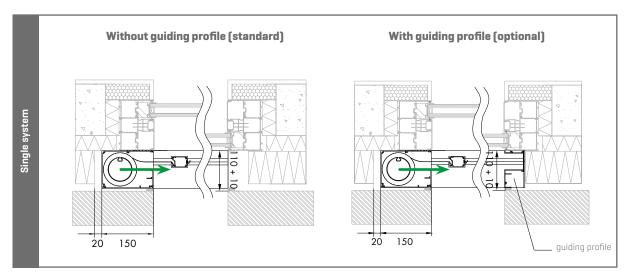


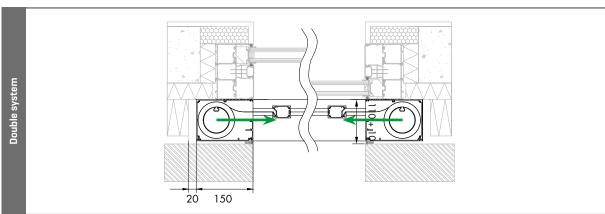


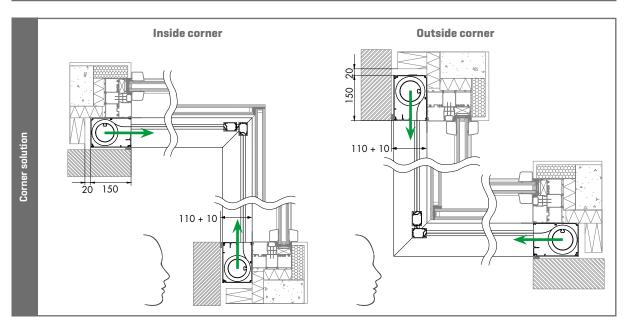


Recessed, in front of the window, with fully finished box

TECHNICAL DRAWINGS

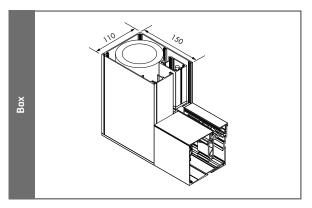


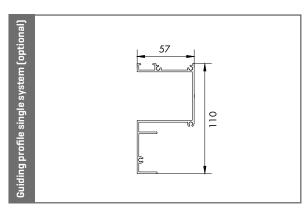


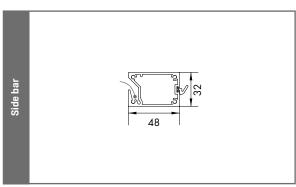


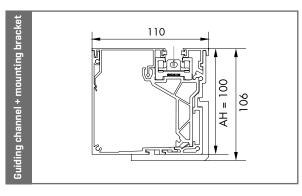
Viewing direction determines selection option cable feed left or right and section width left or right

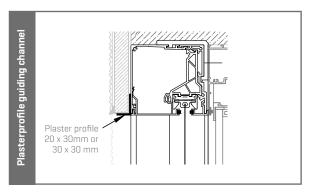
TECHNICAL DRAWINGS

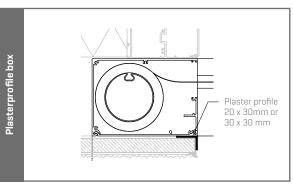


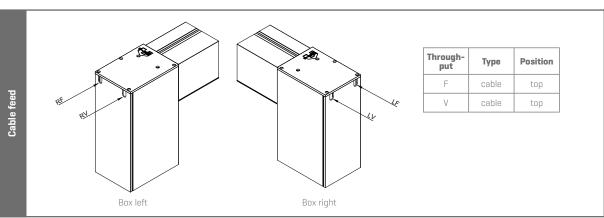












Viewing direction determines selection option cable feed left or right and section width left or right



HORIZONTAL SUN PROTECTION

Horizontal sun protection can withstand heat in case of roof lights, skylights and verandas. Surfaces up to a maximum of 30 m² are perfectly possible. This way, both windproof and non-windproof solutions are possible. Horizontal or inclined glazing is also ideal for houses, hospitals, retirement homes, offices, schools, atriums, shopping centres...





Topfix (p. 170) – horizontal windproof sun protection for sky lights



Topfix VMS (p. 178) – horizontal windproof sun protection for Velux Modular Skylights



Topfix Max (p. 182) – for roof lights up to 30 m^2



Topfix Max F (p. 190) – to be used in open construction



Vegascreen (p. 194) – for verandas

TOPFIX®









TOPFIX® (VMS)

The Topfix (VMS) is an overhead, windproof sun protection sreen. Wind resistance is realised by a combination of a revolutionary tensioning technique with the renowned Fixscreen-technology. This achieves unsurpassed fabric tension. Flapping and torn fabrics belong to the past.

1. VERSATILE

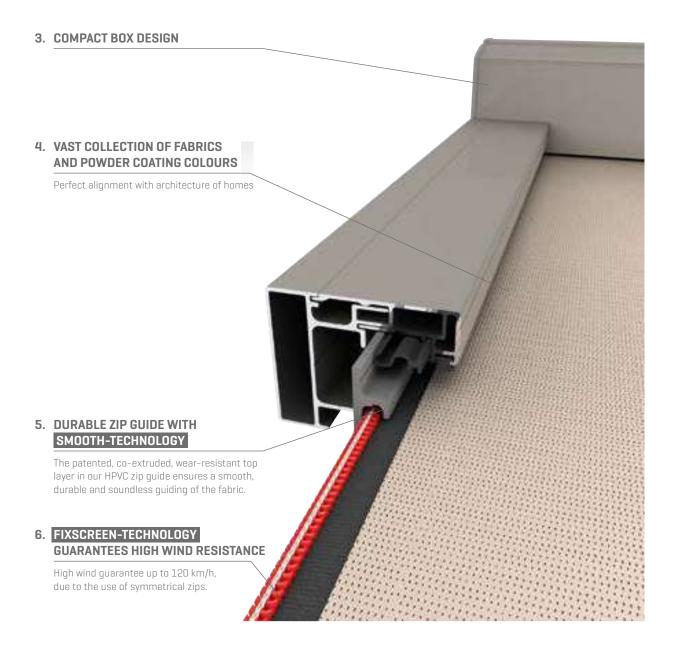
Residential or for projects, on all window types. Topfix VMS for Velux Modular Skylights, both fixed and movable modules.





2. VARIOUS INSTALLATION OPTIONS

Directly on to the window or with mounting feet. Box mounted on top, at the bottom or sideways.



TOPFIX®

The first sun protection applicable in extreme wind loads



WINDPROOF

VERANDA

ROOF LIGHT



Topfix is an excellent sun protection for horizontal or sloping glazing such as roof lights, skylights and conservatories. Perfect integration into your architecture possible due to the compact box dimensions. The revolutionary tensioning technique, combined with Fixscreen-technology ensures an excellent fabric tension. Also in case of extreme wind gusts up to 120 km/h







Single

Coupled

TECHNICAL DATA

Design		
Box size (HxD)		105 x 100 mm
Wind resistance		
Wind class EN13561:2004		3
Guaranteed wind resistance		Up to 120 km/h in closed position
Application		
New buildings		\checkmark
Renovation		✓
Residential		✓
Non-residential		✓
Control		
	Detecto Renson motor Safety First	-
	Somfy mechanical motor	✓
Motorized	Somfy, RTS radio-controlled motor	✓
	Somfy, IO radio-controlled motor	✓

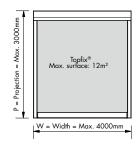
DIMENSIONS

Motorized operation	Applicable fabrics	Dir	mensions
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. width	1000 mm
		Max. width	4000 mm
		Min. projection	300 mm
		Max. projection	3000 mm
		Max. surface	12 m²
	Idem "Single screen" 2-part (1 motor)	Min. width	2300 mm
		Max. width	6000 mm (Max. section width 4000 mm)
Coupled screen		Min. projection	300 mm
		Max. projection	3000 mm
		Max. surface	18 m²
Connected screer	١	Required intermedi 1 mm per 1000 n	ate size (expansion): nm width

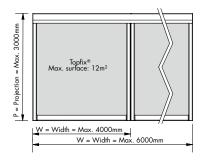
Note:

- Advice installing Topfix without mounting feet: box must be supported
- Installation with box at the bottom: applicable for inside applications
- Installation with box sideways: applicable in case of an inclination angle of 0-45°; motor is always located at the top
- Coupled: every element must meet the technical possibilities of a single screen
- Fahrics
 - Application area of the fabric in function of the slope. See separate table "Applicable fabrics for horizontal sun protection for outside use" on p. 202
- In case of larger widths, there is the risk of the fabric dragging against the glass surface

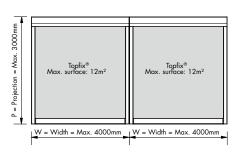
SINGLE



COUPLED



LINKED



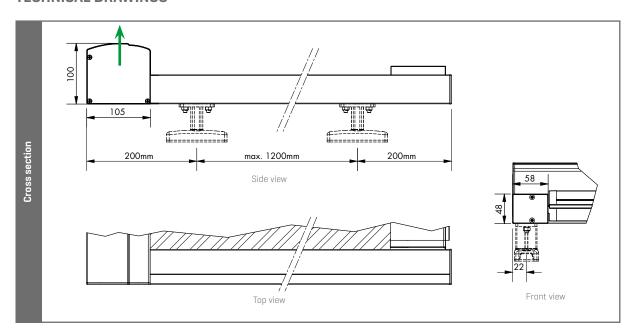
DURABILITY

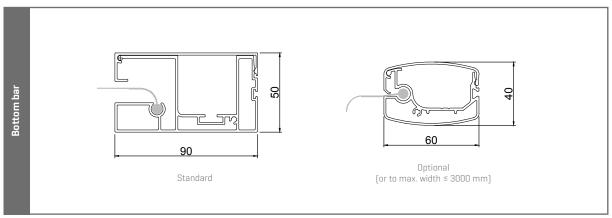
Technology	
Fixscreen-technology in combination with tensioning mechanism through a belt	1
Smooth-technology	✓
Connect&Go-technology	-
Certificates	
Declaration of Performance (DoP)	DOP-201409 - F003
Wind tunnel test report	N° EAR0852
Durability test report	-
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

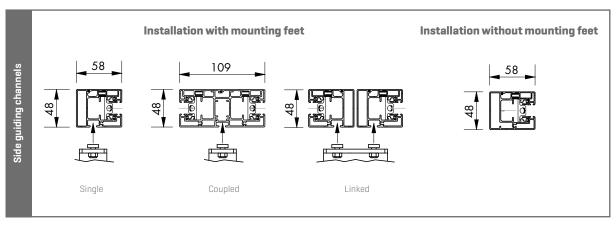


The first sun protection applicable in extreme wind conditions

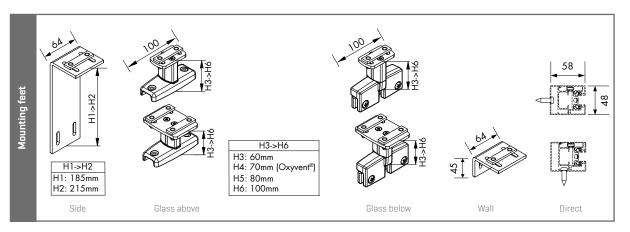
TECHNICAL DRAWINGS

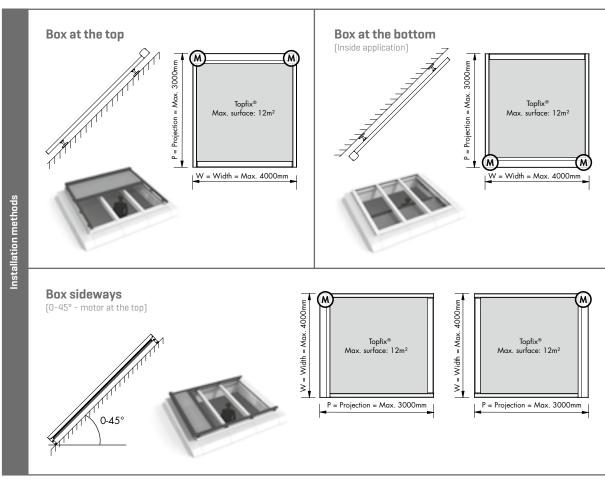


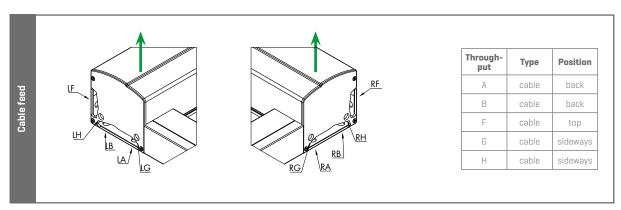




TECHNICAL DRAWINGS







TOPFIX® VMS







WINDPROOF

VELUX MODULAR SKYLIGHT



Topfix VMS is a recognized solution (patented technology) and was specially developed for the Velux Modular Skylights modules. Realized with the renowned Fixscreen-technology, an excellent fabric tension is guaranteed, even in case of extreme wind loads up to 120 km/h. The Topfix VMS fits in both with fixed and movable modules, due to the special mounting bases that facilitate perfect fixation.





TECHNICAL DATA

Design			
Box size (HxD)		105 x 100 mm	
Wind resistance			
Wind class EN13	3561:2004	3	
Guaranteed wind resistance		Up to 120 km/h with mounting feet 80 mm To 80 km/h with mounting feet 160 mm	
Application			
New buildings		✓	
Renovation		✓	
Residential		✓	
Non-residential		✓	
Control			
	Detecto Renson motor Safety First	-	
	Renson motor, mechanical 24V	√ [mandatory for smoke ventilation]	
Motorized	Somfy mechanical motor	✓	
	Somfy, RTS radio-controlled motor	✓	
	Somfy, IO radio-controlled motor	1	
	Becker SMI motor	✓ [mandatory for comfort ventilation]	

DIMENSIONS

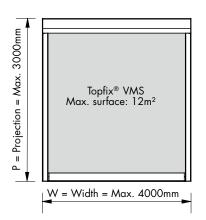
Motorized operation	Applicable fabrics	Dir	nensions
Single screen Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. width	1000 mm	
		Max. width	4000 mm
		Min. projection	300 mm
		Max. projection	3000 mm
		Max. surface 12 m²/deel	12 m²/deel

Note:

- The mounting feet of the Topfix VMS can only be installed in fixed Velux modules, but opening modules can be present between the fixed modules
- For all requirements and prerequisites to guarantee a correct installation on the Velux windows: see product file
- The necessary sensors or programming within your building management system must be provided
- Training in mounting is mandatory for the installer

Options:

- Toolkit case is available optionally
- Setting sets for the Becker SMI and Renson motor [24 V] are available optionally



VELUX® ADVICE - RAL COLORS



If you want to order the Topfix VMS in the same colour as the outside colour of the VELUX Modular Skylight [Noir 2100 Sable YW [Akzo Nobel]] RENSON order no.: STR0292



If you want to order the Topfix VMS in the same colour as the inside colour of the VELUX Modular Skylight [9010 gloss 30] RENSON order no.: STR0292

VELUX® ADVICE - SOLTIS COLORS

S86 – 2044	
S92 – 2044	

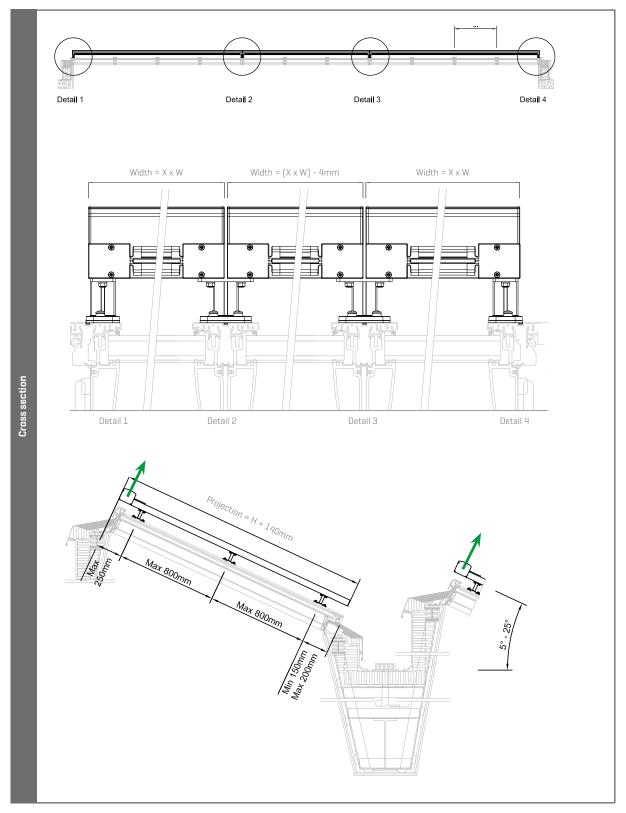
DURABILITY

Technology	
Fixscreen-technology in combination with tensioning mechanism through a rope	/
Smooth-technology	✓
Connect&Go-technology	-
Certificates	
Declaration of Performance (DoP)	D0P-201409 - F003
Wind tunnel test report	N° EAR0852
Durability test report	-
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

TOPFIX® VMS

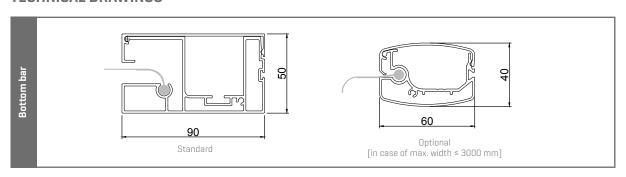
Windproof horizontal sun protection for VELUX® Modular Skylights

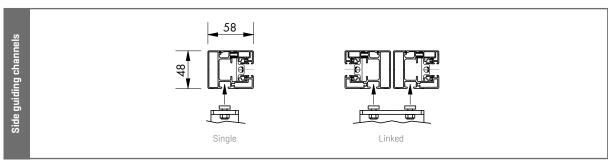
TECHNICAL DRAWINGS

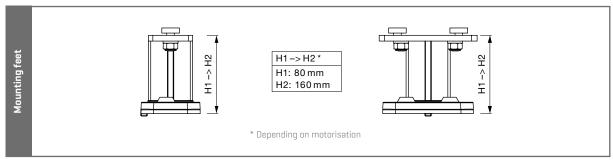


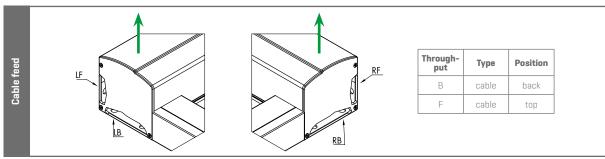
Look at your Topfix VMS from the point from which you would uninstall the fabric tube [

TECHNICAL DRAWINGS









TOPFIX® MAX (F)









TOPFIX® MAX (F)

This horizontal sun protection has a new revolutionary tensioning technique that can cover large surfaces. This integrated tensioning technique realizes an unsurpassed fabric tension. Flapping and torn fabrics belong to the past. Topfix Max repels the heat in case of large roof lights, skylights and conservatories. In combination with black out fabric, a full black out is realizable in case of inside and outside applications – and this up to 30 m². Topfix Max F (freestanding) is placed in open constructions. This offers room for several new installation options that contribute to the Renson® Outdoor Concept.

1. VERSATILE

The Topfix Max-range can be used everywhere, in private homes or in projects such as hospitals, offices, schools.... In addition, it can be applied to all window types.

2. DIFERENT INSTALLATION OPTIONS

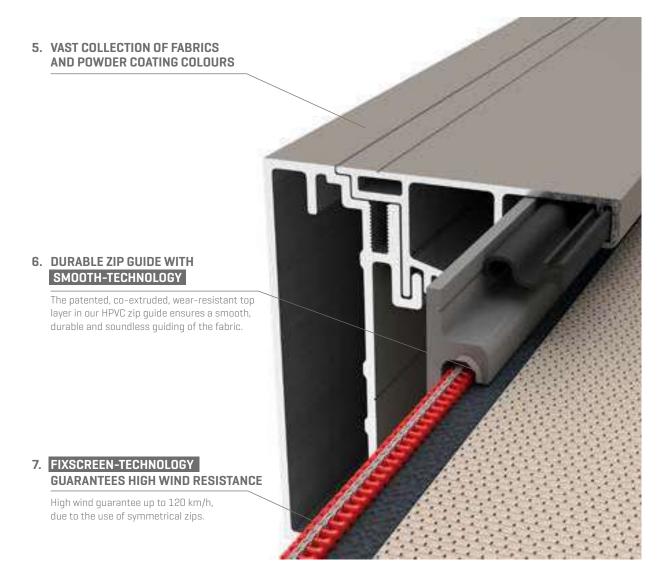
There is a solution for every specific application. The Topfix Max can be attached directly to the window or via different types of mounting bases Moreover, Topfix Max is suitable for both indoor and outdoor sun protection. The box can also be installed overhead or below.

3. LARGE SURFACES

Thanks to its integrated tensioning technology, the Topfix Max (F) is the first windproof sun protection that can handle extremely large surfaces up to 30 m².

4. WITH INTEGRATED WATER DRAINAGE (TOPFIX MAX F)





TOPFIX® MAX

Horizontal sun protection with Fixscreen-technology for large surfaces

HORIZONTAL

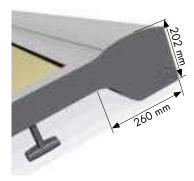
WINDPROOF

VERANDA

ROOF LIGHT



Topfix Max is the first windproof fabric sun protection that can cover extremely large surfaces, even up to 30m^2 . Together with the integrated tensioning technique, an unsurpassed fabric tension is realized. Topfix Max repels the heat in case of large roof lights, skylights and conservatories. In combination with a blackout fabric a full black out is realized for inside and outside applications. Depending on the application, the box can also be installed at the bottom for improved aesthetics.







TECHNICAL DATA

Design				
Box size [HxD]		260 x 202 mm		
Wind resistand	ce			
Wind class EN1	13561:2004	3		
Guaranteed wir	nd resistance	Up to 120 km/h in closed position		
Application				
New buildings		✓		
Renovation		✓		
Residential		✓		
Non-residentia	ıl	/		
Control				
	Detecto Renson motor Safety First	-		
	Somfy mechanical motor	✓		
Motorized	Somfy, RTS radio-controlled motor	✓		
	Somfy, IO radio-controlled motor	✓		

Note:

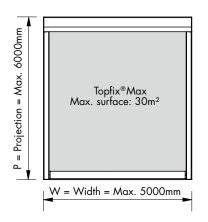
• Mounting recommended with a minimum of 2 persons. Weight: ± 25 or 30 kg/m.

DIMENSIONS

Motorized operation	Applicable fabrics	e fabrics Dimensions		
		Min. width	1225 mm	
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92 Black out polyester fabric Soltis Opaque B92	Max. width	5000 mm	6000 mm
Single screen		Min. projection	300 mm	
		Max. projection	6000 mm	5000 mm
		Max. surface	30 m²	
Linkable		Required intermediate size (expansion) : 1 mm per 1000 mm width		

Note:

- Advice installing Topfix without mounting feet: box must be supported
- Enhrice
 - Horizontal sun protection ≠ rain protection
- Application area of the fabric in function of the inclination. See separate table "Applicable fabrics for horizontal sun protection for outside use" on p. 202



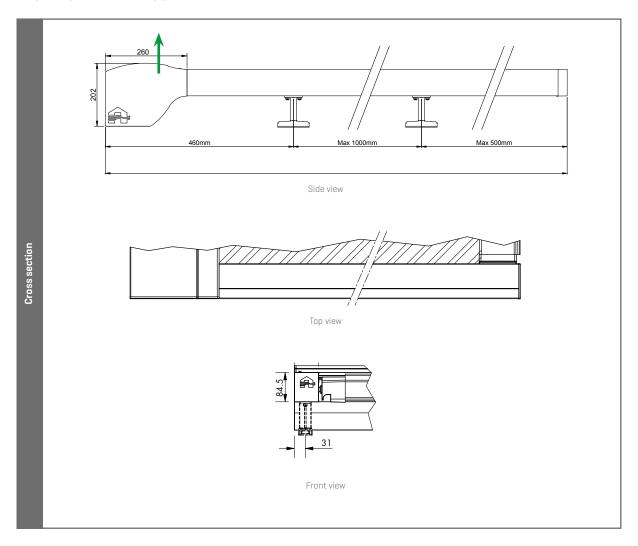
DURABILITY

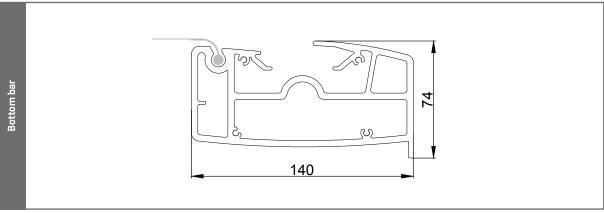
Technology	
Fixscreen-technology in combination with tensioning mechanism through a belt	✓
Smooth-technology	✓
Connect&Go-technology	-
Certificates	
Declaration of Performance [DoP]	D0P-201409 - F003
Wind tunnel test report	-
Durability test report	-
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

TOPFIX® MAX

Horizontal sun protection with Fixscreen-technology for large surfaces

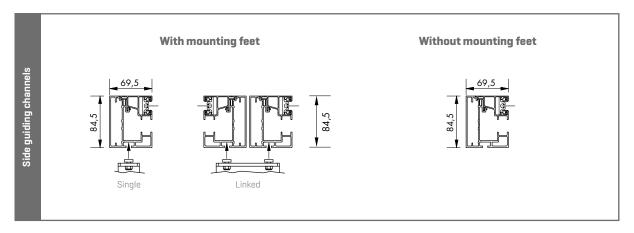
TECHNICAL DRAWINGS

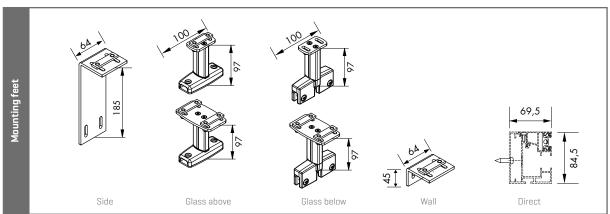


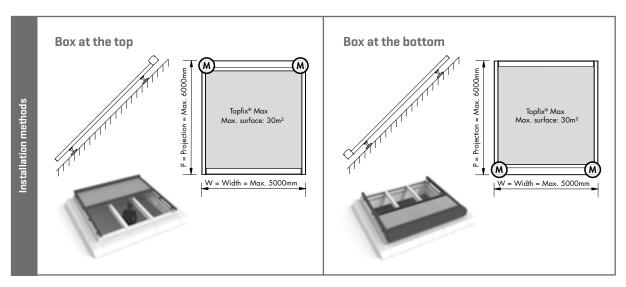


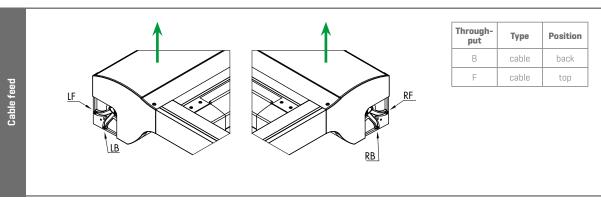
Look at your Topfix Max F from the point from which you would uninstall the fabric tube [

TECHNICAL DRAWINGS









TOPFIX® MAX F

Horizontal sun protection for large surfaces integrated in open construction

HORIZONTAL

WINDPROOF

VERANDA

TERRACE



Topfix Max F (freestanding) can be installed in open constructions. In this way, Renson offers several new installation options and the outside area can be lifted to a higher level. The Topfix Max F can cover extremely large surfaces, even up to 30 m². Together with the integrated tensioning technique, an unsurpassed fabric tension is realized. Moreover, water drainage is integrated into the system.



Integrated water drainage





TECHNICAL DATA

Design				
Box size (HxD)		260 x 202 mm		
Wind resistance	е			
Wind class EN1	3561:2004	3		
Guaranteed win	d resistance	Up to 120 km/h in closed position		
Application				
New buildings		✓		
Renovation		✓		
Residential		✓		
Non-residential		✓		
Control				
	Detecto Renson motor Safety First	-		
	Somfy mechanical motor	-		
Motorized	Somfy, RTS radio-controlled motor	✓		
	Somfy, IO radio-controlled motor	✓		

Note:

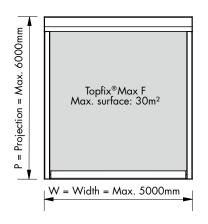
• Mounting recommended with a minimum of 2 persons. Weight: ± 25 or 30 kg/m.

DIMENSIONS

Motorized operation	Applicable fabrics	Dimensio		
		Min. width	1225 mm	
	Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Max. width	5000 mm	6000 mm
Single screen	Polyester fabric Soltis Proof	Min. projection	300 mm	
	W96 Rensonscreen Waterproof	Max. projection	6000 mm	5000 mm
	Nencencer value proce	Max. surface	30 m²	
Linkable		Required intermedi 1 mm per 1000 n		ansion) :

Note:

- Advice installing Topfix Max F without mounting feet: box must be supported
- Fahrics :
- Horizontal sun protection ≠ rain protection
- Application area of the fabric in function of the slope. See separate table "Applicable fabrics for horizontal sun protection for outside use" on p. 202



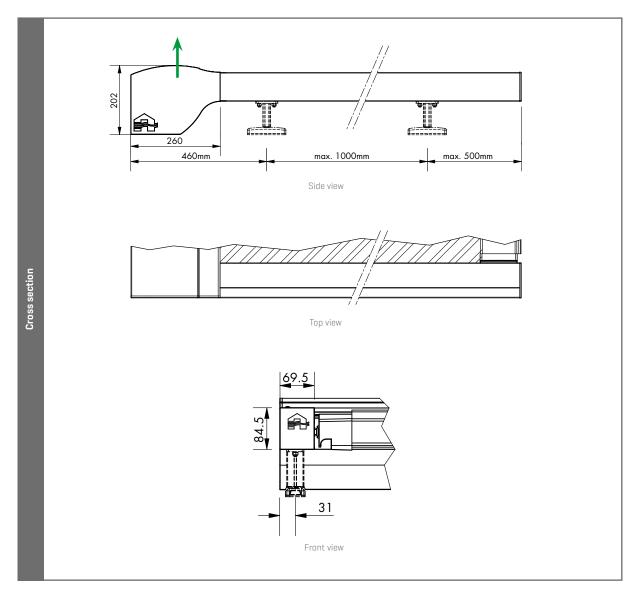
DURABILITY

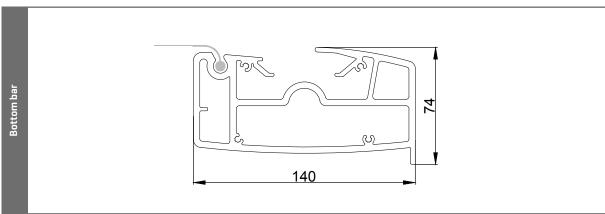
Technology	
Fixscreen-technology in combination with tensioning mechanism through a belt	1
Smooth-technology	✓
Connect&Go-technology	-
Certificates	
Declaration of Performance (DoP)	D0P-201409 - F003
Wind tunnel test report	-
Durability test report	-
Warranty	
10-year warranty on coating of aluminium profiles	✓
7-year warranty on Fixscreen-technology	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

TOPFIX® MAX F

Horizontal sun protection for large surfaces integrated in open construction

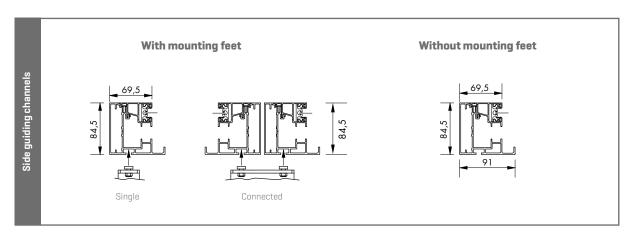
TECHNICAL DRAWINGS

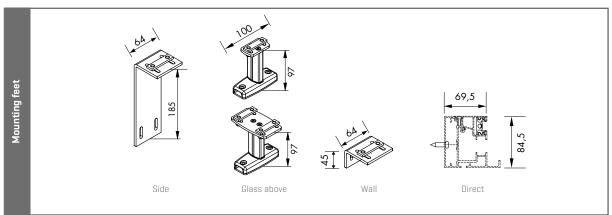


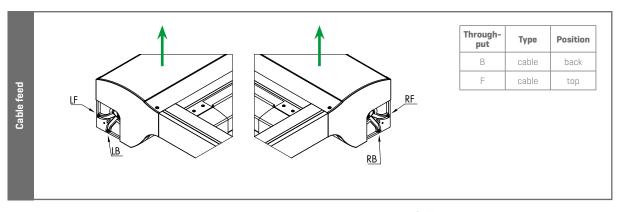


Look at your Topfix Max F from the point of view where you would remove the fabric tube [

TECHNICAL DRAWINGS







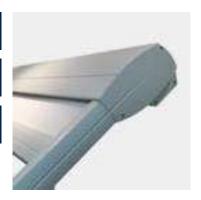
VEGASCREEN®

Superior sun protection technique in service of comfort

HORIZONTAL

WINDPROOF

VERANDA



Vegascreen contributes to realizing a healthy indoor climate in your veranda. The Renson 'Healthy Veranda concept' is a combination of outdoor sun protection and ventilation and offers the possibility to create a comfortable living space, despite of the orientation. Vegascreen, with its elegant slim box, perfectly suits the contemporary glass construction techniques and can be optimally combined with all architectural styles.



TECHNICAL DATA

Design				
Box size (HxD)		230 x 140 mm		
Wind resistance				
Wind class EN135	561:2004	3		
Application				
New buildings		✓		
Renovation		✓		
Residential		✓		
Non-residential		✓		
Control				
	Detecto Renson motor Safety First	-		
	Somfy mechanical motor	✓		
Motorized	Somfy, RTS radio-controlled motor	✓		
	Somfy, IO radio-controlled motor	✓		

DIMENSIONS

Motorized operation	Applicable fabrics	Dir	nensions	
	Acrylic fabric Dickson Orchestra	Min. width	900 mm	
	Acrylic fabric Dickson Orchestra MAX	Max. width	4500 mm	
	Polyester fabric Soltis Horizon	a fabric Dickson Orchestra fabric Dickson lestra MAX Max. width Max. width Max. projection Max. projecti	300 mm	
		Max. projection	6000 mm	
Cinala caroon	Opaque B92	Max. surface	27 m²/single section	
Single screen	Acrylic fabric Dickson Symphony Acrylic fabric Dickson Opera	Min. width	900 mm	
		Max. width	4000 mm	
		Min. projection	300 mm	
		Max. projection	6000 mm	
		Max. surface	24 m²/single section	
Linkable		Required intermediate size (expansion) : 1 mm per 1000 mm width		
		Min. width	4001 mm	
Symphony Acrylic fabric Dickson Op	Same as 'Single screen'	Max. width	(Max. section width	
	2-part (1 motor)	Min. projection	300 mm	
		Max. projection	6000 mm	
		Max. surface	24 m²/coupled section	

P = Projection = Max. 6000mm

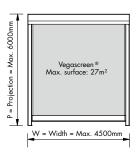
Note:

- From 3000 mm projection, one additional support roll
- From 5000 mm projection, two additional support rolls
- - Horizontal sun protection offers no protection against rain
 - Application area of the fabric in function of the slope. See separate table "Applicable fabrics for horizontal sun protection for outside use" on p. 202

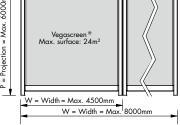
DURABILITY

Technology	
Tensioning mechanism by means of a strap	✓
Smooth-technology	-
Connect&Go-technology	-
Certificates	
Declaration of Performance (DoP)	DOP-201409 - F003
Wind tunnel test report	-
Durability test report	-
Warranty	
10-year warranty on acrylic fabrics	✓
10-year warranty on coating of aluminium profiles	✓
5-year warranty for electronic controls [motor & automation]	✓
5-year product warranty	✓
5-year warranty on fabric collection	✓
5-year warranty on gloss level	✓

SINGLE



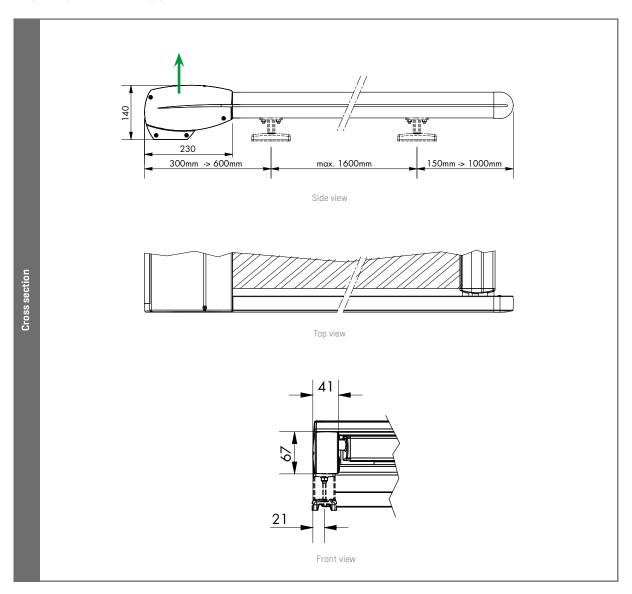
COUPLED

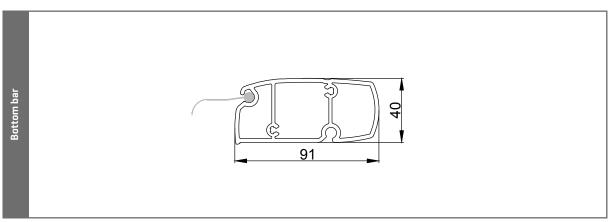


VEGASCREEN®

Superior sun protection technique in service of comfort

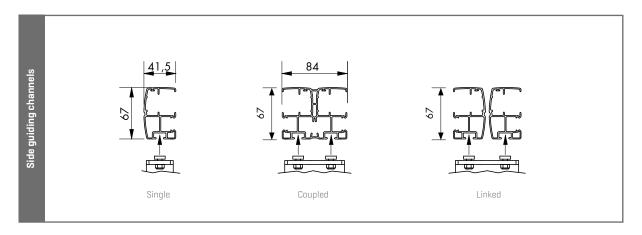
TECHNICAL DRAWINGS

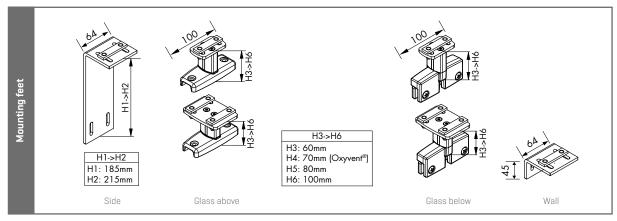




Look at your Vegascreen from the point from which you would uninstall the fabric tube [

TECHNICAL DRAWINGS







HOW DO YOU CHOOSE A FABRIC?

Next to a functional role, namely sun protection, the screen fabrics also have a decorative aspect. They seamlessly fit the architecture of the home. Moreover, all fabrics have an exceptionally long service life and keep insects outside. We differentiate between fabrics based on how much you can look through the fabric and light transmission, and a wide range of options in between. Thanks to their specific features and the extensive colour range, there is a suitable type of fabric for each application.

STEPS

STEP 1. WHAT IS THE APPLICATION OF THE SCREEN?

STEP 2. WHAT ARE THE REQUIREMENTS THAT THE FABRIC MUST MEET?

STEP 3. WHAT ARE THE CUSTOMERS PERSONAL PREFERENCES?





STEP 1. WHAT IS THE APPLICATION OF THE SCREEN?

A specific type of sun protection is selected depending on the application. As not all fabrics can be used in all products, this can already be the first step in the selection of the desired screen fabric.

For example, we recommend fibreglass fabrics with Fixscreen, while we choose polyester fabrics for Topfix.

			Translucent sun	protection fabric			
		Fibreglass fabrics*		Polyester fabric			
	Sergé	Natté	Privacy	Soltis* Horizon 86	Soltis [®] Perform 92	Soltis® Proof W96	
Fixscreen® 100	√	√	✓	✓	✓	-	
Fixscreen® 100 Slim	✓	√	✓	✓	✓	-	
Fixscreen® 100 Slim F	✓	✓	✓	-	-	-	
Fixscreen® 150	1	✓	✓	✓	✓	-	
Fixscreen® 150 F	/	/	✓	-	-	-	
Fixscreen® Minimal	1	/	✓	-	-	-	
Fixscreen® Minimal F	1	1	✓	-	-	-	
Fixvent® / Fixscreen® Mono AK ^{EVO}	1	1	✓	✓	✓	-	
Panovista® (Max)	1	1	1	-	-	-	
Slidefix*	1	1	-	✓	✓	-	
Topfix*	-	-	-	✓	✓	-	
Topfix* VMS	-	-	-	✓	✓	-	
Topfix® Max	-	-	-	✓	✓	-	
Topfix® Max F	-	-	-	✓	✓	✓	
Vegascreen®	-	-	-	✓	✓	-	

^{*} Option crystal window on p. 230

Note

For the restrictions in dimensions (see product pages) and table inclination angle of fabrics (see following page).

Sun protection fabric	Insect proof	Black ou	ut fabric		
Acrylic fabric		Fibreglass fabrics	Polyester fabric		
Dickson ^e Orchestra (Max)	Tuffscreen	Satiné 21154	Soltis® Opaque B92		
_	✓	✓	✓	Fixscreen® 100	
_	✓	✓	✓	Fixscreen® 100 Slim	
_	✓	_	_	Fixscreen® 100 Slim F	
_	✓	✓	✓	Fixscreen® 150	ion
-	✓	-	-	Fixscreen® 150 F	Vertical sun protection
-	-	✓	✓	Fixscreen® Minimal	ical sur
-	-	-	-	Fixscreen® Minimal F	Vert
-	✓	✓	✓	Fixvent® / Fixscreen® Mono AK/UT ^{EVO}	
-	-	-	-	Panovista® (Max)	
-	✓	✓	✓	Slidefix®	
-	-	-	✓	Topfix®	
-	-	-	-	Topfix® VMS	otection
-	-	-	✓	Topfix® Max	al sun pr
-	-	-	-	Topfix® Max F	Horizontal sun protection
✓	-	-	✓	Vegascreen®	Ξ.

INCLINATION ANGLE OF FABRICS HORIZONTAL SUN PROTECTION

			Polyester fabric				Acrylic Fibregla	
		Soltis® Horizon 86	Soltis ^e Perform 92	Soltis® Opaque B92	Soltis® Proof W96	fabric	fabric	
INCLINATION ANGLE*	WIDTH	PROJECTION	SUN PROTECTION (WATER RESISTANT IFO FABRIC TYPE)					
Topfix®								
≤ 8°	W ≤ 4000 mm	P ≤ 3000 mm	✓					
	W ≤ 4000 mm	P ≤ 1500 mm	1	1	/			
8° < ≤ 20°	W ≤ 1250 mm	1500 < P ≤	1	/	/			
	1250 < W ≤ 4000 mm	3000 mm	1	/				
l > 20°	W ≤ 4000 mm	P ≤ 3000 mm	/	/	/			
Topfix® VMS								
≤ 8°	W ≤ 4000 mm	P ≤ 3000 mm	1					
I > 8°	W ≤ 4000 mm	P ≤ 3000 mm	1	/				
Topfix® Max								
≤ 8°	W ≤ 5000 mm	P ≤ 6000 mm	✓					
00 .1 . 1 . 1 . 1 . 1	W ≤ 4000 mm	4000 < P ≤	/	1	/			
8° < l ≤ 15°	4000 < W ≤ 5000 mm	6000 mm	/					
	W ≤ 5000 mm	P ≤ 6000 mm	1	/	/			
I > 15°	W ≤ 6000 mm	P ≤ 5000 mm	1					
Topfix® Max F								
l ≤ 6°	W ≤ 5000 mm	P ≤ 6000 mm	/					
00 1 . 70	W ≤ 2000 mm	P ≤ 5000 mm	1	1				
6° < I ≤ 7°	W ≤ 5000 mm	P ≤ 6000 mm	1					
	W ≤ 3000 mm	P ≤ 5000 mm	/	/				
7° < ≤ 8°	W ≤ 5000 mm	P ≤ 6000 mm	/					
	W ≤ 2000 mm	P ≤ 5000 mm	/	/		/		
8° < ≤ 9°	W ≤ 4000 mm		/	1				
	4000 < W ≤ 5000 mm	P ≤ 6000 mm	1					
	W ≤ 3000 mm	P ≤ 5000 mm	/	/		/		
9° < ≤ 10°	W ≤ 4000 mm		/	/				
	4000 < W ≤ 5000 mm	P ≤ 6000 mm	/					
	W ≤ 3000 mm	P ≤ 5000 mm	/	/		/		
10° < ≤ 11°	W ≤ 4000 mm		/	/		/		
	4000 < W ≤ 5000 mm	P ≤ 6000 mm	/			-		
	W ≤ 4000 mm		1	1		1		
11° < ≤ 13°	4000 < W ≤ 5000 mm	P ≤ 6000 mm	1			1		
	W ≤ 5000 mm	P ≤ 6000 mm	/			✓ /		
I > 13°	W ≤ 6000 mm	P ≤ 5000 mm	/			✓ /		

SUN PROTECTION (NOT WATER-RESISTANT)

Note: The smaller the inclination angle, the bigger the risk of possible sagging of the fabric Width > 4000 mm ==> Big risk of wrinkling

UITVAL

P ≤ 6000 mm

HELLINGSHOEK

Vegascreen*

BREEDTE

W ≤ 4500 mm

STEP 2. WHAT ARE THE REQUIRE-MENTS THAT THE FABRIC MUST MEET?

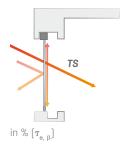
Different fabric types, different colours, weaving, .. everything has an impact on the technical features of the fabric. It is therefore important to have a clear picture of the requirements that the fabric must meet. This again depends on both the type of building, the application and the use of the area. For example, the thermal value a fabric can reach can be decisive, a specific fire resistance,.. But the visual parameters can also have an influence.

1. TECHNICAL VALUES OF A FABRIC



Opening factor (OF)

The bigger the opening factor, the bigger the translucence and the better the visibility to the inside and outside.



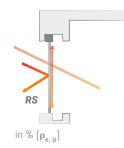
Solar transmission factor (TS)

Percentage of the incoming energy that passes through the fabric.



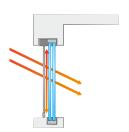
Light transmission factor (TV)

The bigger the light transmission factor, the more light passes through the fabric and the better the light strength (lux) in the area.



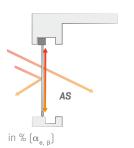
Solar reflection factor (RS)

Percentage of the incoming energy that is reflected by the fabric.



Shading coefficient (g,,,)

Total energy percentage that enters through a window to the inside with sun protection fabric.

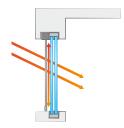


Solar absorption factor (AS)

Percentage of the incoming energy that is absorbed by the screen fabric.

TS + RS + AS = 100% of the incoming energy $[\tau_{\rm e,\,\beta}+\rho_{\rm e,\,\beta}+\alpha_{\rm e,\,\beta}=1]$

2. THERMAL COMFORT



Solar gain is evaluated using the \boldsymbol{g}_{tot} value or the total shading coefficient. This value is the total energy percentage that enters through a window to the inside with sun protection fabric. It therefore shows the efficiency of the fabric.

The g -value of the sun protection in combination with a glazing type C can be classified according to the table below.

Glazing type C

4/16/4 double glazing with low emission

 $U = 1.2W/m^2K$

0	±, = v v / · · · ·	
q.	= 0,59	

Class	0	1	2	3	4
g _{tot}	g _{tot} ≥ 0.50	$0.35 \le g_{tot} < 0.50$	$0.15 \le g_{tot} < 0.35$	$0.10 \le g_{tot} < 0.15$	g _{tot} < 0.10
Effect	Very little effect	Little effect	Moderate effect	Good effect	Very good effect

Additionally, the g value is always included in case of a sun protection in combination with glazing type D.

Glazing type D

Reflecting 4/16/4 double glazing

with low emission

 $U = 1,1W/m^2K$

$$g_0 = 0.32$$

Next to these values, reduction factor F is also used. This reduction factor is a measure of the fraction of solar energy which is only admilted by the sun protection.

$$F = \frac{g_{tot}}{g_n}$$

For your information: All our sun protection fabrics are included in the EPB-data bank. This data bank is coupled to the EPB-software 3G. This way the \mathbf{g}_{tot} value can be calculated automatically.

Tip: Choose thermal comfort and prevent overheating indoors

- A dark fabric withstands the heat better
- A fabric with a small opening factor better withstands the heat

3. VISUAL COMFORT

A. Visual contact with the outside

The extent to which a person on the inside (at 1 m distance from the fully lowered sun protection), can distinguish a person or object on the outside (at 5 m from the fabric sun protection). The visual contact with the outside can be classified from 0 to 4 in accordance with the table below.

Class	0	1	2	3	4
Effect	Very little effect	Little effect	Moderate effect	Good effect	Very good effect

B. Use of natural daylight

- Capacity of the sun protection to limit the time during which artificial light is required
- Capacity of the sun protection to optimally use the available daylight

Class	0	1	2	3	4
Effect	Very little effect	Little effect	Moderate effect	Good effect	Very good effect

C. Glare

- Reduce light contrasts between the various zones in the visual field
- Prevent disturbing reflections on the screen because of the luminance of the window

Class	0	1	2	3	4
Effect	Very little effect	Little effect	Moderate effect	Good effect	Very good effect

D. Night privacy

Capacity of an external solar shading to withdraw people from view, in a fully closed or lowered condition.

Class	0	1	2	3	4
Effect	Very little effect	Little effect	Moderate effect	Good effect	Very good effect

Tip: Choose visual comfort and preserve the outside view

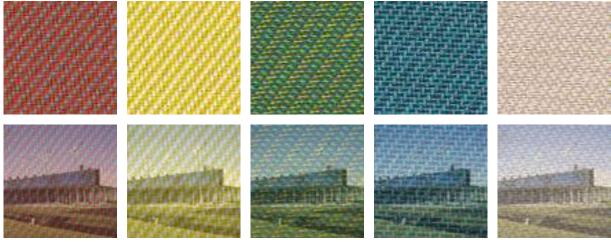
- A dark fabric offer a better view to the outside during the day
- A light fabric allows more daylight to enter
- A fabric with a small opening factor:
 - Offers more privacy,
 - Lets enter less light,
 - Prevents glare.

STEP 3. WHAT ARE THE CUSTOMER'S PERSONAL PREFERENCES?

There is no argument about odours and colours. Fortunately, the range of colours and weaving patterns has been vastly expanded. The aesthetics of the fabric (colour, weaving pattern, confection side,...) have an impact on the functionality. The impact always differs slightly. Combine and find the perfect solution!

COLOUR OF THE FABRIC

The various fabric types consist of a vast colour range. The choice is often motivated by aesthetic preference. However, functionality should not be overlooked. The colour plays and important role in transparency and translucence. Dark fabrics offer a better outside view. Light and heat beams are also absorbed, while these are reflected in lighter fabrics.

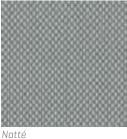


Example of colour impact of the screen fabric on your environment

WEAVING PATTERN

An important factor in the choice of the screen fabric is the look of the fabric. Besides colour, the weaving pattern has a big impact. For example, there are various options for fibreglass fabrics such as a denser or perpendicular weaving.







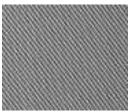
Sergé

Privacy

CONFECTION SIDE

A fabric has two sides. Confection side 1 is the top of the fabric sample in the Renson fabric sample swatch. This is the exterior view of the screen fabric. Confection side 2 is the bottom of the fabric sample in the Renson fabric sample swatch. The confection side is marked on all technical drawings.





Example confection 1

Example confection 2

WELDING SEAM & FABRIC DIRECTION

If both width and height are larger than the fabric roll, a welding seam is visible so that both fabric sections can be connected to each other. The position of the welding seam differs from fabric to fabric and from the dimensions of the fabric. The height of welding seam is always calculated from the lowest point of the frame. Renson always tries to manufacture your screen with the least amount of welding seams possible. This means that, per order, we look to see if it is possible to turn the screens so that they can be manufactured without any welding seams.





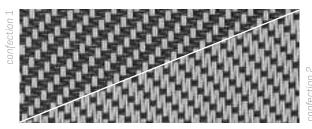


Please note:

- If the order concerns a follow-up order, then subsequently, it is important that this is indicated. This way, Renson can guarantee that the same screen direction is used as in the first order.
- If a Slidefix and another vertical screen are ordered in the same order with the same fabric, and when both of these products must be manufactured using welding seams, then the screen direction will have to be different. Slidefix always has a vertical heat-sealed seam, while other vertical screens have a horizontal welding seam.

OVERVIEW RENSON FABRIC RANGE

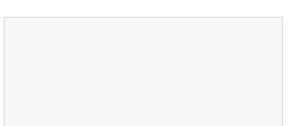
TRANSLUCENT FABRICS



Fibreglass fabrics (Sergé, Natté, Privacy)

p. 211

Fibreglass fabrics are woven from fibreglass yarns provided with a PVC-coating and are available in many colours. A fibreglass fabrics is shape-retaining, insensitive to moisture and heat, rot-free and colour-fast. Fibreglass fabrics guarantee an excellent view to the outside while the view to the inside remains limited during the day.



Crystal screen

p. 224

A crystal screen is a transparent PVC fabric that guarantees optimal contact with the environment



Polyester fabric Soltis Horizon 86 / Soltis Perform 92 p. 218

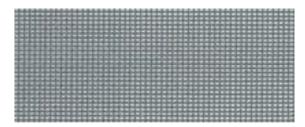
This fabric is made of high tensile strength polyester yarn and consists of a fine meshed tissue that has a PVC-coating according to the Précontraint-technique. This results in an extremely stable fabric that will hardly deform under load.



Polyester fabric Soltis Proof W96

p. 220

This polyester fabric is woven using a précontraint technique and a waterproof, translucent coating has been applied to it.



Insect mesh Tuffscreen

p. 222

An insectproof fabric or Tuffscreen can be applied for products with the Fixscreen-technology.

BLACK OUT FABRICS



Blackout fibreglass fabrics Satiné 21154

p. 216

This fibreglass fabrics consists of a standard fibreglass provided with a PVC-coating.



Black out polyester fabric Soltis Opaque B92

p. 221

The standard polyester fabric Soltis Perform 92 is provided with a blackout PVC-coating. Perfectly applicable for interior and exterior applications, for all areas that must be blacked out.

DID YOU KNOW THAT ...

- A screen fabric in a dark colour offers the best views to the outside?
- A screen fabric in a lighter colour reflects more sunrays than a screen fabric in a darker colour?
- A fully blackout fabric is the best choice for your bedrooms?
- Glass fibre & polyester fabrics can be printed for additional personalization?
- A mosquito mesh that repels all insects but offers little sun protection?



FIBREGLASS FABRICS

Screen fabric consisting of woven and coated fibreglass yarns or simply fibreglass fabrics

The yarns of the fibreglass core have been separately coated with a plastisol layer. This manufacturing process results in soft screen fabrics. The screen fabric has a high selfweight and is ideally suited for vertical rolling sun protection systems.

TECHNICAL FEATURES

	Sergé	Natté	Privacy
Composition	Fibregla	ass yarns (42 %) with PVC coating	g (58 %)
Available width	From 1350 to 2700 mm Limited selection up to 3200 mm	2500 mm Limited selection up to 3200 mm	2700 mm
Fire resistance class	Euroclass NF EN 13501-1 (EU): c-s3 d0 NF P 92-503 (FR): M1	Euroclass NF EN 13501-1 (EU): c-s3 d0 (1 mounted according to EN 13823 & EN 14716) NF P 92-503 (FR): M1 DIN 4102-1 (DE): B1 NF F16-101 (FR): F3	Euroclass NF EN 13501-1 (EU): c-s3 d0 (1 mounted according to EN 13823 & EN 14716) DIN 4102-1 (DE): B1 NF P 92-503 (FR): M1 NF F16-101 (FR): F3
Lightfastness	Grade 7 - ISO105 B 02	Grade 7-8 - ISO105 B02	Grade 7 - ISO105 B 02
Thickness	ca. 0,55 mm - EN ISO 5084	ca. 0,53 mm - EN ISO 2286 - 3	ca. 0,80 mm - ISO 5084
Weight	ca. 535 g/m² - NF 12127	ca. 560 g/m² - EN ISO 2286 - 2	ca. 620 g/m² - NF EN 12127
Tearing strength warp	8,5 daN - EN ISO 4674-1	≥ 10 daN - EN 1875 - 3	5,90 daN - ISO 4674-1
Tearing strength weft	7,5 daN - EN ISO 4674-1	≥ 9 daN - EN 1875 - 3	6,20 daN - ISO 4674-1
Breaking strength warp	> 260 daN/5 cm - EN ISO 1421	> 220 daN/5 cm - EN ISO 1421	> 321 daN/5cm - EN ISO 1421
Breaking strength weft	> 225 daN/5 cm - EN ISO 1421	> 200 daN/5 cm - EN ISO 1421	> 277 daN/5 cm - EN ISO 1421
Opening factor	5%	3%	1%

Tip: If you do not use the screen with the fibreglass fabrics for a while [fabric stays rolled up in the box], more tension develops on the fabric. Upon first use, the fabric may display some wrinkle formation. By fully rolling out the fabric tube, the wrinkle formation will disappear and you can again enjoy a well tensioned fabric.

FIBREGLASS FABRICS SERGÉ

FABRIC COLORS WITH CORRESPONDING RAL COLOR

Ref.	RAL Equiv-		AS	RS	TS	TV	g _{tot}	ext.	Thermal comfort	Visual contact	Use of natural	Glare	Night- privacy	Visualisation CF1
	alent						С	D	С	with the outside	daylight			
SC0202 [+]	9003	CF1	13,2	65,9	21,0	21,2	0,15	0,10	2	0	2	1	2	
360202 [+]	3003	CF2	12,7	66,3	21,0	21,2	0,15	0,10		U				
SC2020 [+]	1015	CF1	32,5	52,5	14,9	12,9	0,13	0,09	3	3	2	0	1	
302020[1]	1013	CF2	32,4	52,7	14,9	12,9	0,13	0,09	J	J		U	1	
SC4949	9006	CF1	53,0	37,0	10,0	9,0	0,11	0,09	3	1	1	1	2	
00 10 10	3000	CF2	53,0	37,0	10,0	9,0	0,11	0,09	J					
SC0707	7038	CF1	51,7	38,3	10,1	8,4	0,11	0,09	3	3	1	1	1	运行 。2018年
000707	, 000	CF2	50,5	39,4	10,1	8,4	0,11	0,09						
SC0101 [+]	7037	CF1	81,3	15,1	3,5	3,6	0,10	0,08	3	2	1	3	2	建筑建筑建
000101[1]	, 00,	CF2	81,3	15,1	3,5	3,6	0,10	0,08		_			_	进行的,这种证明这些
SC1111	7048	CF1	77,0	18,0	5.0	6,0	0,10	0,09	3	2	1	3	2	200 2000000
	7010	CF2								_	_	U	_	"我还是我们的一个人的,我们
SC5959	7016	CF1	87,1	6,7	6,2	6,2	0,11	0,09	4	2	1	3	2	
[NEW]	7010	CF2	87,1	6,7	6,2	6,2	0,11	0,09		_			_	
SC3030 [+]	7021	CF1	91,4	5,0	3,6	3,6	0,10	0,09	3	2	1	3	2	
	,001	CF2	91,6	4,8	3,6	3,6	0,10	0,09				J		100000000000000000000000000000000000000
SC6060	9005	CF1	92,0	4,0	4,0	5,9	0,09	0,07	3	2	1	3	2	
(NEW)	91115	CF2	92,0	4,0	4,0	5,9	0,09	0,07	J	_		J		

OTHER FABRIC COLORS

Ref.		AS	RS	TS	TV	g _{tot}	ext.	Thermal comfort	Visual contact	Use of natural	Glare	Night- privacy	Visualisation CF1
						С	D	С	with the outside	daylight			
SCM36 [+]	CF1	27,7	59,8	12,4	11,6	0,11	0,08	3	1	1	1	2	
36M30 [+]	CF2	23,4	64,2	12,4	11,6	0,10	0,07	J		1	1	_	
SC2002 [+]	CF1	26,4	58,2	15,5	13,7	0,13	0,09	3	1	2	1	2	· · · · · · · · · · · · · · · · · · ·
362002 [+]	CF2	28,1	56,4	15,5	13,7	0,13	0,09	J	1		1		
SCM45 [+]	CF1	48,7	42,6	8,7	7,8	0,10	0,08	3	3	1	1	1	
SUM45 [T]	CF2	52,4	38,9	8,7	7,8	0,10	0,08	J	J	1	1	1	
SC1002[+]	CF1	39,1	49,2	11,7	10,2	0,11	0,08	3	1	1	1	2	
361002 [+]	CF2	43,6	44,6	11,7	10,2	0,12	0,09	J	1	1	1		
SC0110 (+)	CF1	68,8	26,5	4,7	4,5	0,09	0,08	4	2	1	3	2	的是一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一种的一
201110[+]	CF2	73,8	21,5	4,7	4,5	0,10	0,08	3		1	J		在一种 的复数 医多种
SC0102[+]	CF1	56,2	37,2	6,7	6,6	0,09	0,08	4	2	1	3	2	37575757575
360102 [+]	CF2	66,4	26,9	6,7	6,6	0,10	0,08	3		1	J		750505050505
SCM31 [+]	CF1	63,0	33,2	3,9	3,6	0,08	0,07	4	2	1	3	1	
OCIMIST [+]	CF2	70,9	25,2	3,9	3,6	0,09	0,08	4	_	1	J	Т	
SC0207 [+]	CF1	37,4	50,9	11,7	9,9	0,11	0,08	3	1	1	1	2	47.0000045140
560207[+]	CF2	41,4	46,9	11,7	9,9	0,11	0,08	3	1	1	1	2	レオチェスティチェスチェス
SC0606	CF1	88,0	8,1	3,9	3,8	0,10	0,09	3	2	1	3	2	
SCUBUB	CF2	87,7	8,4	3,9	3,8	0,10	0,09	3	2	1	3	2	
001011 (.)	CF1	87,4	6,5	6,1	6,1	0,09	0,07	4	3	1	1	-1	THE PARTY OF THE PARTY.
SC1011 (+)	CF2	87,9	6,0	6,1	6,1	0,09	0,07	4	3	1	1	1	3 (0) (44/10)
SC0130 (+)	CF1	86,5	9,9	3,6	3,6	0,10	0,09	3	2	1	3	2	\$1.00 mark 10.00 miles
300130[+]	CF2	83,8	12,6	3,6	3,6	0,10	0,08	3		1	J		
001000 (+)	CF1	73,2	21,1	5,7	5,0	0,10	0,09	3	2	1	2	0	COLORAGISTICA
SC1006 (+)	CF2	66,3	28,0	5,7	5,0	0,10	0,08	3	2	1	3	2	
SC2050	CF1	70,6	21,1	8,3	7,8	0,12	0,09	3	-1	1	-1	2	
202020	CF2	59,7	32,0	8,3	7,8	0,11	0,09	3	1	1	1	2	Caraca Ca
001100 (+3	CF1	73,4	23,0	3,6	3,0	0,09	0,08	4	0	1	2	2	
SCM33 (+)	CF2	76,5	19,8	3,6	3,0	0,09	0,08	4	2	1	3	2	
0001/10 (.)	CF1	76,0	18,4	5,6	4,7	0,10	0,09			-1	0		在新疆的东西的东西的东西
SC0140 (+)	CF2	77,6	16,8	5,6	4,7	0,11	0,09	3	2	1	3	2	

Subject to errors and technical changes.

The colours printed here may deviate slightly, please consult our fabric sample swatch for the exact colour.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: shading coefficient in % • TV: light transmission factor in % • g_{tot} ext. in case of glazing type C • g_{tot} ext. in case of glazing type D • Classification thermal and visual comfort in accordance with EN 14501A

CF 1 = Confection side 1, upper side fabric sample swatch • CF 2 = Confection side 2, bottom side fabric sample swatch

^{(+):} Additional fabric width of 3200 mm for a selection of colours.

FIBREGLASS FABRICS SERGÉ

ARCHITECTS' SELECTION

The colours are based on the latest trends in the interior, exterior & architectural world.

Ref.		AS	RS	TS	TV	g _{tot}	ext. D	Thermal comfort C	Visual contact with the outside	Use of natural daylight	Glare	Night- privacy	Visualisation CF1
SC3131	CF1 CF2	75,0	17,9	7,1	7,0	0,11	0,09	3	3	1	1	1	
000001 (.)	CF1	70,4	22,5	7,1	6,6	0,11	0,09	3	3	1	1	1	
SC3231 (+)	CF2	67,6	25,3	7,1	6,6	0,11	0,09	3	3	1	1	1	020000000000000000000000000000000000000
SC3232 (+)	CF1 CF2	63,8	27,9	8,3	7,4	0,11	0,09	3	3	1	1	1	
SC3301 (+)	CF1	74,7	17,0	8,3	8,0	0,12	0,10	3	3	1	1	1	
	CF2	73,3	18,4	8,3	8,0	0,12	0,10						THE PROPERTY OF THE PARTY.
SC3332[+]	CF1	67,5	24,7	7,8	7,3	0,11	0,09	3	3	1	1	1	THE RESERVE OF THE PARTY OF THE
المالية المالية	CF2	69,7	22,5	7,8	7,3	0,11	0,09	3	J	1	1	1	
663333 [1]	CF1	72,4	20 5	7,1	6,8	0.11	0,09	3	3	1	1	1	Water out of the sales of the
SC3333 [+]	CF2	72,4	20,5	/,⊥	0,0	0,11	0,09	3	3	1	1	1	Market All Market

Subject to errors and technical changes.

The colours printed here may deviate slightly, please consult our fabric sample swatch for the exact colour.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: shading coefficient in % • TV: light transmission factor in % • g_{tot} ext. in case of glazing type C • g_{tot} ext. in case of glazing type D • Classification thermal and visual comfort in accordance with EN 14501A

CF 1 = Confection side 1, upper side fabric sample swatch • CF 2 = Confection side 2, bottom side fabric sample swatch

[+]: Additional fabric width of 3200 mm for a selection of colours.



Fibreglass fabrics Fixscreen

FIBREGLASS FABRICS NATTÉ

A Natté fibreglass fabrics is a fabric a with perpendicular weaving pattern.

Ref.		AS	RS	TS	TV	g _{tot}	ext.	Thermal comfort C	Visual contact with the outside	Use of natural daylight	Glare	Night- privacy	Visualisation CF1
N-0202 [+]	CF1 CF2	11	70	19	18	0,13	0,09	3	1	2	1	2	
N-0220 (+)	CF1 CF2	21	62	17	14	0,13	0,09	3	1	2	1	2	
N-0207 [+]	CF1 CF2	34	53	13	11	0,12	0,08	3	1	2	1	2	
N-0201 (+)	CF1 CF2	47	44	9	6	0,10	0,08	3	2	1	1	2	
N-0701 (+)	CF1 CF2	62	30	8	6	0,11	0,08	3	2	1	2	2	
N-3001 (+)	CF1 CF2	85	12	3	3	0,10	0,08	3	2	1	3	2	
N-3006 (+)	CF1 CF2	89	8	3	3	0,10	0,09	3	2	1	3	2	
N-3030 (+)	CF1 CF2	91	6	3	3	0,09	0,08	4	2	1	3	2	

Subject to errors and technical changes.

The colours printed here may deviate slightly, please consult our fabric sample swatch for the exact colour.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: shading coefficient in % • TV: light transmission factor in % • g_{tot} ext. in case of glazing type C • g_{tot} ext. in case of glazing type D • Classification thermal and visual comfort in accordance with EN 14501A

CF 1 = Confection side 1, upper side fabric sample swatch • CF 2 = Confection side 2, bottom side fabric sample swatch

[+]: Additional fabric width of 3200 mm for a selection of colours.



Fibreglass fabrics Fixscreen® 150 & Topfix® Max

FIBREGLASS FABRICS PRIVACY

A Privacy (Sergé 1%) fibreglass fabrics is a fabric with an opening factor of only 1%. This fabric offers privacy without restricting the view to the outside.

Ref.		AS	RS	TS	TV	g _{tot}	ext.	Thermal	Visual contact	Use of natural	Glare	Night- privacy	Visualisation CF1
						С	D	С	with the outside	daylight		pao,	
P-0202	CF1 CF2	15,9	71,3	12,8	12,9	0,09	0,06	4	1	2	1	2	
P-2020 (P-0808)	CF1 CF2	39,9	54,2	5,9	3,7	0,06	0,04	4	2	1	2	2	
P-0707	CF1 CF2	60,3	36,9	2,8	2,1	0,05	0,04	4	2	0	3	2	
P-0207	CF1 CF2	45,9 36,2	48,8 58,5	5,3	4,3	0,08	0,06	4	2	1	2	2	
P-0101	CF1 CF2	80,2	17,4	2,4	2,2	0,06	0,05	4	2	0	3	2	
P-0102	CF1 CF2	53,0 66,6	44,8 31,2	2,2	2,0	0,06	0,05	4	2	0	3	2	
P-0606 (P-1111)	CF1 CF2	90	8,6	1,4	1,3	0,06	0,05	4	2	0	3	2	
P-0130	CF1 CF2	88,3 84,8	10,5 14,0	1,2	1,2	0,09	0,08	4	2	0	3	2	
P-3030 (P-1010)	CF1 CF2	93	5,9	1,1	1,1	0,06	0,05	4	2	0	3	2	

Subject to errors and technical changes.

The colours printed here may deviate slightly, please consult our fabric sample swatch for the exact colour.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: shading coefficient in % • TV: light transmission factor in % • g_{tot} ext. in case of glazing type C • g_{tot} ext. in case of glazing type D • Classification thermal and visual comfort in accordance with EN 14501A

CF 1 = Confection side 1, upper side fabric sample swatch • CF 2 = Confection side 2, bottom side fabric sample swatch

BLACKOUT FIBREGLASS FABRICS

TECHNICAL FEATURES

	Satiné 21154
Composition	Fibreglass strand [28%] with PVC coating [72%]
Available width	2100 mm
Fire resistance	NF P 92-503 (FR): M1
Lightfastness [ISO2286-3]	Grade 7/8
Thickness [IS02286-3]	0,75 mm
Weight (ISO2286-2)	660 g/m²
Tearing strength warp (EN 1875 - 3)	7 daN
Tearing strength weft [EN 1875 - 3]	7 daN
Breaking strength warp (EN ISO 1421)	225 daN/ 5 cm
Breaking strength weft [EN ISO 1421]	190 daN/ 5cm
Opening factor	0%

Ref.		AS	RS	TS	TV	g _{tot}	ext.	Thermal comfort	Visual contact	Use of natural	Glare	Night- privacy	Visualisation CF1
						С	D	С	with the outside	daylight		,	
GVV 0101	CF1	79	21	0	0	0,03	0,02	4	0	0	4	4	
GVV 0102	CF1	59	41	0	0	0,02	0,02	4	0	0	4	4	
GVV 0210	CF1	48	52	0	0	0,02	0,02	4	0	0	4	4	
GVV 0202	CF1	31	69	0	0	0,01	0,01	4	0	0	4	4	
GVV 0707	CF1	63	37	0	0	0,02	0,02	4	0	0	4	4	
GVV 2020	CF1	45	55	0	0	0,02	0,02	4	0	0	4	4	
GVV 3030	CF1	93	7	0	0	0,03	0,03	4	0	0	4	4	建筑建筑

Subject to errors and technical changes.

The colours printed here may deviate slightly, please consult our fabric sample swatch for the exact colour.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: shading coefficient in % • TV: light transmission factor in % • g_{tot} ext. in case of glazing type C • g_{tot} ext. in case of glazing type D • Classification thermal and visual comfort in accordance with EN 14501A

POLYESTER FABRIC SOLTIS®

Screen fabrics based on pre-stressed polyester fabric

This sun protection fabric is made of high tensile strength polyester yarn [HTP]. After weaving, the fabric is stretched very taut in both directions and then fixed using liquid PVC by means of the Précontraint technique. This provides the fabric with a great deal of dimensional stability, so that it cannot become deformed under load. The fabric fulfils the requirements involving high fabric tension without sagging, therefore making it very suitable for large areas. The fabric is used for both horizontal an vertical applications, where transparency a must.

TECHNICAL FEATURES

	Soltis® Horizon 86	Soltis® Perform 92	Soltis* Opaque B92 Black out fabric	Soltis® Proof W96
Composition	Polyester text	ile fabric manufactured in accord	dance with PRECONTRAINT FERRA	ARI-technology
Available width NF	1770/2670 mm	1770/2670 mm	1700 mm	2670 mm
Fire resistance class	Euroclass NF EN 13501-1 (EU): b-s2 d0 NF P 92-503 (FR): M1	Euroclass NF EN 13501-1 (EU): b-s2 d0 NF P 92-503 (FR): M1	Euroclass NF EN 13501-1 (EU): b-s2 d0 NF P 92-503 (FR): M2	NF P 92-503 (FR): M1
Thickness [EN ISO 2286-3]	ca. 0,43 mm	ca. 0,45 mm	ca. 0,60 mm	ca. 0,56 mm
Weight (EN ISO 2286-2)	ca. 380 g/m²	ca. 420 g/m²	ca. 650 g/m²	ca. 620 g/m²
Tearing strength warp (DIN 53.363)	45 daN	45 daN	45 daN	25 daN
Tearing strength weft (DIN 53.363)	20 daN	20 daN	25 daN	20 daN
Breaking strength warp (EN ISO 1421)	230 daN/5 cm	310 daN/5 cm	330 daN/5 cm	220 daN/5 cm
Breaking strength weft [EN ISO 1421]	160 daN/5 cm	210 daN/5 cm	220 daN/5 cm	220 daN/5 cm
Opening factor	14%	3%	0%	4-5%

POLYESTER FABRIC SOLTIS® HORIZON 86

Ref.		AS	RS	TS	TV	g _{tot}	ext.	Thermal comfort	Visual contact	Use of natural	Glare	Night- privacy	Visualisation CF1
						С	D	С	with the outside	daylight			
S86-2051	CF1	40,0	40,0	20,0	20,0	0,17	0,12	2	3	2	0	0	
[+]	CF2	20,0	60,0	20,0	20,0	0,15	0,10	2	3	2	0	0	
S86-2046	CF1	36,0	43,0	21,0	20,0	0,17	0,13	2	3	2	0	0	
[+]	CF2	22,0	57,0	21,0	20,0	0,16	0,11	2	3	2	0	0	
S86-2048	CF1 CF2	42,0	39,0	19,0	19,0	0,16	0,12	2	4	2	0	0	
S86-2171 [+]	CF1 CF2	42,0	39,0	19,0	17,0	0,16	0,13	2	4	2	0	0	
S86-2068	CF1	49,0	35,0	16,0	15,0	0,15	0,12	2	4	2	0	0	
300-2000	CF2	77,0	7,0	16,0	15,0	0,17	0,14	2	4	2	0	0	
S86-2167 [+]	CF1 CF2	68,0	17,0	15,0	14,0	0,16	0,13	2	4	2	0	0	
S86-2047 [+]	CF1 CF2	78,0	7,0	15,0	15,0	0,17	0,14	2	4	2	0	0	
S86-51176 (NEW)	CF1	81,0	5,0	14,0	14,0	0,10	0,07	2	4	2	0	0	
S86-2044 [+]	CF1 CF2	12	59	29	28	0,20	0,14	2	3	2	0	0	
S86-2135 (+)	CF1 CF2	39,0	41,0	20,0	17,0	0,16	0,13	2	3	2	0	0	
S86-2012 [+]	CF1 CF2	55,0	27,0	18,0	16,0	0,17	0,12	2	4	2	0	0	
S86-2043 (+)	CF1 CF2	74,0	11,0	15,0	15,0	0,16	0,13	2	4	2	0	0	

Subject to errors and technical changes.

The colours printed here may deviate slightly, please consult our fabric sample swatch for the exact colour.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: shading coefficient in % • TV: light transmission factor in % • g_{tot} ext. in case of glazing type C • g_{tot} ext. in case of glazing type D • Classification thermal and visual comfort in accordance with EN 14501A

CF 1 = Confection side 1, upper side fabric sample swatch • CF 2 = Confection side 2, bottom side fabric sample swatch

^{(+):} Additional fabric width of 2670 mm for a selection of colours.

POLYESTER FABRIC SOLTIS® PERFORM 92

Ref.		AS	RS	TS	TV	g _{tot}	ext.	Thermal comfort	Visual contact	Use of natural	Glare	Night- privacy	Visualisation CF1
						С	D	С	with the outside	daylight			
S92-2051	CF1	41,0	47,0	12,0	11,0	0,12	0,08	3	1	1	1	2	
[+]	CF2	21,0	67,0	12,0	11,0	0,10	0,07	3	1	1	1	2	
S92-2046	CF1	43,0	48,0	9,0	8,0	0,10	0,09	3	1	1	1	2	
[+]	CF2	28,0	63,0	9,0	8,0	0,08	0,07	4	1	1	1	2	
S92-2048 [+]	CF1 CF2	46,0	46,0	8,0	8,0	0,09	0,07	4	1	1	1	2	
S92-50272 (+)	CF1 CF2	33,0	55,0	12,0	9,0	0,11	0,08	3	1	1	1	2	
S92-2171 (+)	CF1 CF2	51,0	41,0	8,0	6,0	0,10	0,08	3	2	1	2	2	
S92-2068	CF1	62	34	4	4	0,08	0,07	4	2	1	3	2	
295-5000	CF2	88	8	4	4	0,10	0,09	3	2	1	3	2	
S92-2074	CF1	60,0	37,0	3,0	4,0	0,07	0,07	4	2	1	3	2	
[+]	CF2	72,0	25,0	3,0	4,0	0,08	0,08	4	2	1	3	2	
S92-2167 [+]	CF1 CF2	78,0	19,0	3,0	3,0	0,09	0,09	4	2	1	3	2	
S92-2047 [+]	CF1 CF2	87	8	5	5	0,11	0,09	3	2	1	3	2	
S92-51176 (NEW)	CF1	92,0	5,0	3,0	3,0	0,04	0,03	3	2	1	3	2	
S92-2044 [+]	CF1 CF2	13,0	68,0	19,0	17,0	0,14	0,09	3	1	2	1	2	
S92-2175 [+]	CF1 CF2	16	65	19	17	0,14	0,10	3	1	2	1	2	
S92-50265 [+]	CF1 CF2	42	49	9	6	0,10	0,07	3	2	1	2	2	
S92-2012	CF1 CF2	63	30	7	6	0,10	0,08	3	2	1	3	2	
S92-2043 [+]	CF1 CF2	83	13	4	4	0,10	0,09	3	2	1	3	2	
S92-2135	CF1 CF2	45	46	9	6	0,10	0,08	3	2	1	1	2	
	CF2												

Subject to errors and technical changes.

The colours printed here may deviate slightly, please consult our fabric sample swatch for the exact colour.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: shading coefficient in % • TV: light transmission factor in % • g_{tot} ext. in case of glazing type C • g_{tot} ext. in case of glazing type D • Classification thermal and visual comfort in accordance with EN 14501A

CF 1 = Confection side 1, upper side fabric sample swatch • CF 2 = Confection side 2, bottom side fabric sample swatch

(+): Additional fabric width of 2670 mm for a selection of colours.

POLYESTER FABRIC SOLTIS® PROOF W96

Ref.		AS	RS	TS	TV	g _{tot}	ext. D	Thermal comfort C	Visual contact with the outside	Use of natural daylight	Glare	Night- privacy	Visualisation CF1
W96-1103	CF1 CF2	16	67	17	16	0,13	0,09	3	0	2	2	4	
W96-8102	CF1 CF2	12	71	17	17	0,12	0,08	3	0	2	2	4	
W96-8861	CF1 CF2	24	63	13	9	0,11	0,08	3	0	1	2	4	
W96-2171	CF1 CF2	39	52	9	4	0,09	0,07	4	0	1	2	4	
W96-2047	CF1 CF2	86	11	3	3	0,1	0,08	4	0	1	3	4	

Subject to errors and technical changes.

The colours printed here may deviate slightly, please consult our fabric sample swatch for the exact colour.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: shading coefficient in % • TV: light transmission factor in % • g_{tot} ext. in case of glazing type C • g_{tot} ext. in case of glazing type D • Classification thermal and visual comfort in accordance with EN 14501A

CF 1 = Confection side 1, upper side fabric sample swatch • CF 2 = Confection side 2, bottom side fabric sample swatch



Topfix® Max

BLACK OUT POLYESTER FABRIC SOLTIS® OPAQUE B92

A black out sun protection fabric is the ideal solution for bedrooms, both for installation on the inside or on the outside.

Ref.		AS	RS	TS	TV	g _{tot}	ext.	Thermisch comfort C	Visueel contact met buiten	Gebruik van natuurlijk daglicht	Ver- blinding	Nacht- privacy	Visualisatie CF1
B92-2135	CF1	53	47	0	0	0,05	0,04	4	0	0	4	4	
B92-2171	CF1	55	45	0	0	0,05	0,05	4	0	0	4	4	
B92-1043	CF1	88	12	0	0	0,08	0,07	4	0	0	4	4	
B92-1044	CF1	28	72	0	0	0,03	0,02	4	0	0	4	4	
B92-1045	CF1	65	35	0	0	0,05	0,05	4	0	0	4	4	
B92-1046	CF1	51	49	0	0	0,05	0,04	4	0	0	4	4	in the manual to
B92-2053	CF1	93	7	0	0	0,08	0,08	4	0	0	4	4	
B92-51176 (NEW)	CF1	94	6	0	0	0,02	0,02	4	0	0	4	4	

Subject to errors and technical changes.

The colours printed here may deviate slightly, please consult our fabric sample swatch for the exact colour.

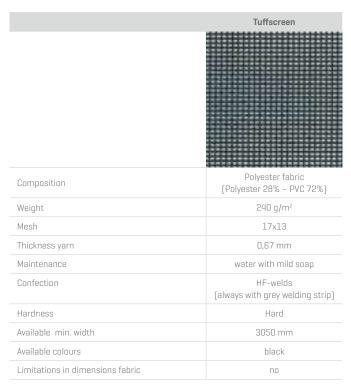
AS: solar absorption factor in % • RS: solar reflection factor in % • TS: shading coefficient in % • TV: light transmission factor in % • g_{tot} ext. in case of glazing type C • g_{tot} ext. in case of glazing type D • Classification thermal and visual comfort in accordance with EN 14501A

CF 1 = Confection side 1, upper side fabric sample swatch • CF 2 = Confection side 2, bottom side fabric sample swatch

INSECT FABRIC

It is possible (and useful) to use insect mesh with products with Fixscreen-technology. When the screen is lowered, it prevents insects and other vermin to enter your home from coming in.

TECHNICAL FEATURES





Fixscreen® 100

ACRYLIC FABRIC ORCHESTRA (MAX)

Woven polyacrylic fabric or simply acrylic fabric

These fabrics are woven with polyacrylate yarns (polyacrylonitrile) and are mass-coloured. The fibres are extremely resistant to UV-radiation. After weaving, they undergo a chemical post-treatment that make them even more water repellent and protected against dirt. The fabric panels start at a maximum width of about 1200 mm and are stitched together and seamed all around. The width of the seams and overlaps may differ depending on the manufacturer and application. These fabrics are ideally suited for all external sun protection with the exception of vertical applications [non-transparent].

Collections: DICKSON





Acrylic fabric with Vegascreen®

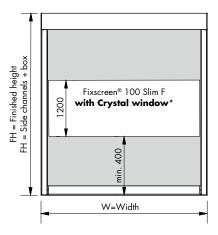
CRYSTAL FABRIC

Transparent fabric



A transparent crystal screen can be integrated into a fibreglass fabrics with Fixscreen 100 Slim F and Fixscreen 150 F. This ensures that optimal contact with the outside is retained.

A Crystal window across the width of the screen and 1,200 mm height. Between Crystal windows in the full width and the bottom edges a distance of 400 mm should be maintained.





PERSONALIZED PRINTING

Next to the standard screen fabric range, fabrics can also be personalized. This consists of printing the logo of a company as well as printing a photo on a screen fabric under a terrace covering.







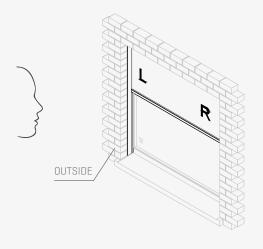


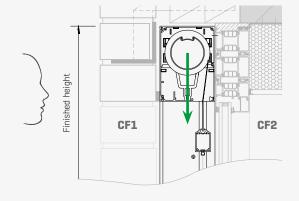
LOCATION CABLE FEED AND CONFECTION SIDE

For vertical sun protection the location of the **cable feed** is related to the choice of product and installation method. Every location has a specific code and can be located left or right. The position from which to determine the choice of cable location left or right is indicated on the technical drawings in our brochure by means of the image below of a face. In case of the Panovista [Max] and Slidefix angle solution, this viewing position also determines the section width.

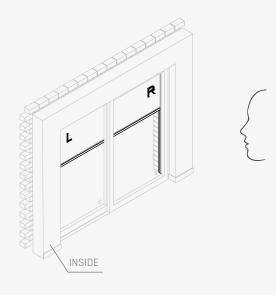
A fabric has two sides. In case of woven fabrics, there is a small difference in the weave. **Confection side 1** (CF1) is the top of the fabric sample in the Renson fabric sample swatch. This is the exterior view of the screen fabric. **Confection side 2** (CF2) is the bottom of the fabric sample in the Renson fabric sample swatch. The confection side is indicated with CF1 and CF2 on all technical drawings.

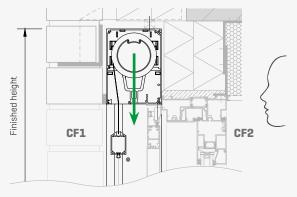
FIXSCREEN (Except Fixscreen 100 Slim IM 7B & Fixscreen 150 IM 7B) FIXSCREEN MINIMAL PANOVISTA (MAX) SLIDEFIX





FIXSCREEN 100 SLIM IM 7B FIXSCREEN 150 IM 7B



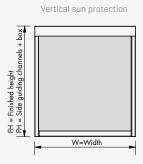


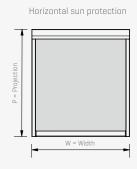
HOW DO I CORRECTLY MEASURE A SCREEN?

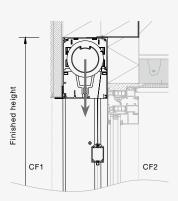
To calculate the price of a screen and place a correct order for a screen, it is extremely important that the dimensions of the screen are correctly measured and entered. Further clarification on the dimensions of the different solutions is provided below.

Single screen:

- Fixscreen IM 1 (Solar) (F),
 IM 4, IM 6 & IM 7 (F)
- Fixscreen Minimal IM 1 (F)
- Topfix (VMS)
- Topfix Max (F)
- Vegascreen







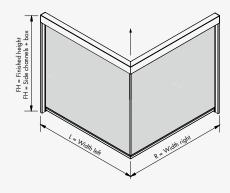
Width = the total measured width of the head box, including the side supporting end caps. Finished height or projection = side guiding channels (incl. footplate) + head box

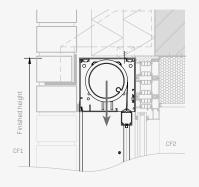
Single screen:

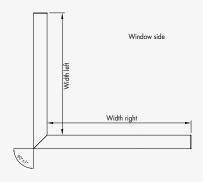
• Panovista (Max)

Width = the total measured width of the head box, including the side supporting end caps. In angled solutions, the width is always measured on the window side.

Finished height = side guiding channels (incl. footplate) + head box







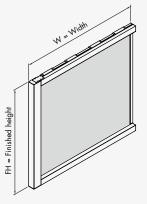
Single screen:

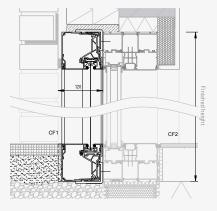
Slidefix

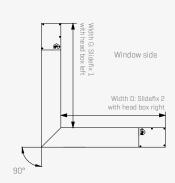
Width = the total measured width of the side guiding channels + head box. In angled solutions, the width is always measured on the window side.

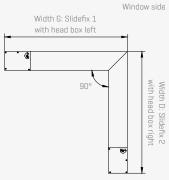
Finished height = total height of the head box, including the side guiding channels.

Please note! The installation brackets are not included [2 x 6 mm]



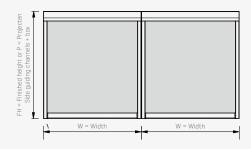






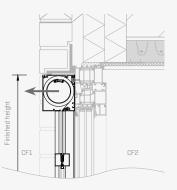
Joined or connected screens:

- Fixscreen IM 1, IM 1+, IM 4, IM 6 & IM 7
- Fixscreen Minimal IM 1
- Topfix (VMS)
- Topfix Max (F)
- Vegascreen



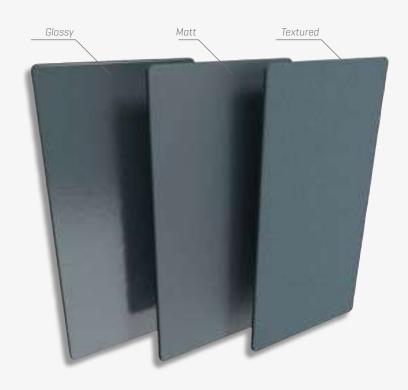
Width = the total measured width of one part. On the joined or connected side, this runs to the centre of the coupling side guiding channel or mounting base.

Finished height or projection = side guiding channels (incl. footplate) + head box



RENSON® COLOURS

You can choose from a wide range of colours. Available as standard in approximately 100 different colours with gloss level 70%, gloss level 30%, or architectural textured coating. This ensures that the sun protection always fits in seamlessly with the building's style. The choice is yours: a glossy or matt finish or rather a trendy texture coating that is not only wear-and scratch resistant, but also maintenance-friendly.



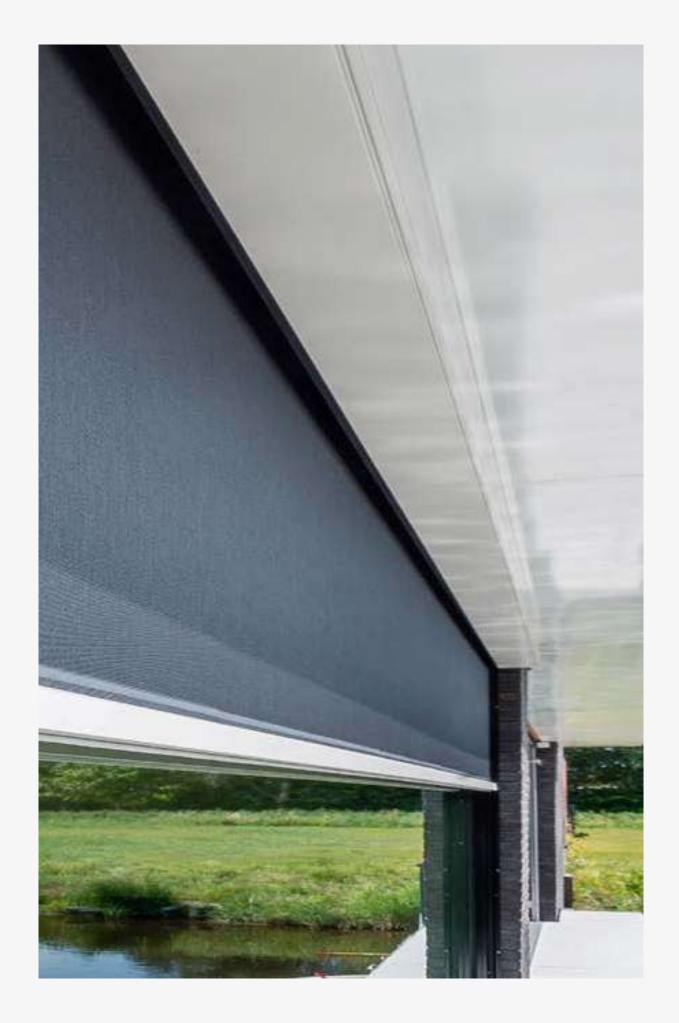
To guarantee the colour-fastness of the paint, we recommend Seaside Quality for coastal areas and other aggressive environments (heavy industry, ...). In this way, the paintwork always remains in perfect condition and will still look new after several years.

Bi-colour

With Fixscreen Mono AK^{EVO} en Fixvent Mono AK^{EVO} it is possible to provide the inside and the outside of the box with two different colours. In doing so, the inside can match the interior colour shades while the profiles on the outside are in harmony with the outside façade.

Multiple colours

If desired, the box, both side guiding channels and the bottom bar can be manufactured in up to to 4 different colours. All of this depends on the appearance of the building and the wishes of the customer.



AUTOMATISATION

The motor is a crucial component in automating sun protection. It is therefore very important to choose a reliable and right solution tailored to your needs.

Optimal comfort and ease of use are quaranteed for all motors.



Mechanical Somfy motors

The standard tubular motor for every situation. The end adjustment is made using a universal adjustment cable or directly via the end of the motor. Corded motors can be combined perfectly with a switch or home automation system.



Detecto Rensonmotor Safety First

The end points are automatically set for a Detecto Rensonmotor Safety First, which ensures continuous fabric tension. This motor is not only equipped with obstacle detection, it also distinguishes between an obstacle and a gust of wind. The motors are also perfectly combinable with a wall switch or a home automation system.



Radio-controlled Somfy io motor

These motors combine all benefits of radio-controlled motors with those of the io Homecontrol. The 2-way control with feedback, via the wireless handheld or wall transmitter or via the app, ensure that you are perfectly aware of the position of your screens. These motors can be adjusted wirelessly.



Radio-controlled Somfy RTS motor

These radio-controlled motors with RTS technology are being used in countries where the io frequency is not allowed. These motors combine all the benefits of wired tubular motors with those of wireless technology. They can be operated by remote control and wireless wall switches, without feedback. These motors can be adjusted wirelessly.



Radio-controlled Somfy Solar motor

The Solar motor is a radio-controlled motor where the battery is charged by a durable solar panel. This motor offers all the advantages of radio-controlled motors, being the wireless configuration and operation.

MOTORS

	WIRED	MOTORS	SOMFY RADIO-CONTROLLED MOTORS					
	Perfect combination home automation (B	ith wired Wall switch with wall switches or uilding Management nd, NHC, KNX,)		ndheld transmitter / W ation with Somfy hom				
мотоктуре	MECHANICAL SOMFY MOTOR	DETECTO RENSONMOTOR SAFETY FIRST	IO MOTOR	RTS MOTOR	SOLAR RTS MOTOR			
CONNECTION METHOD								
Power supply	Mains supply	Mains supply	Mains supply	Mains supply	Solar powered			
Parallel switching 2 or more motors	✓ via relay	1	1	1	/			
ENDLIMIT SETTING & ADJUSTMENT								
Adjustment on the motor	/	-	-	-	-			
Adjustment via transmitter	-	-	/	/	/			
Adjustment via via Set&Go	-	-	✓	-	-			
Auto adjustment via setting equipment	-	√	-	-	-			
APPLICABILITY								
Fixscreen	✓	✓	✓	✓	-			
Fixscreen Solar	-	-	-	-	✓			
Fixscreen Minimal	-	✓	✓	-	-			
Panovista	✓	/ *	✓	✓	-			
Panovista Max	✓	-	✓	/	-			
Slidefix	✓	-	✓	✓	-			
Topfix	✓	-	✓	✓	-			
Topfix Max	✓	-	✓	✓	-			
Topfix Max F	-	-	✓	✓	-			
Vegascreen	✓	-	✓	✓	-			
FUNCTIONALITIES RADIO-CONTROL	LED							
Feedback motor position (2-way)	-	-	✓	-	-			
Reach	-	-	20 metres through two concrete walls	20 metres through two concrete walls	20 metres through two concrete walls			
Signal frequency	-	-	868,25 Mhz (Not applicable for usage in US / China / Canada / Australia)	433,42 Mhz	433,42 Mhz			

^{*} Without obstacle detection

Motor Selector? See p. 239



SENSORS

Sensors monitor the comfort and react fully automatically based on changes in a specific situation. This can be based on predetermined scenarios, fully according to the wishes and requirements of the customer and/or depending on the weather conditions. Sensors also function autonomously if you are not at home and automatically extend the service life of the sun protection. Automated sun protection can reduce energy consumption by up to 36%.



Wind sensor

A wind sensor rolls up the sun protection screen depending on the wind speed you have set. This protects your screen against unexpected heavy winds. Our wireless sensor is easy to install and only requires minimal cabling.



Solar sensor

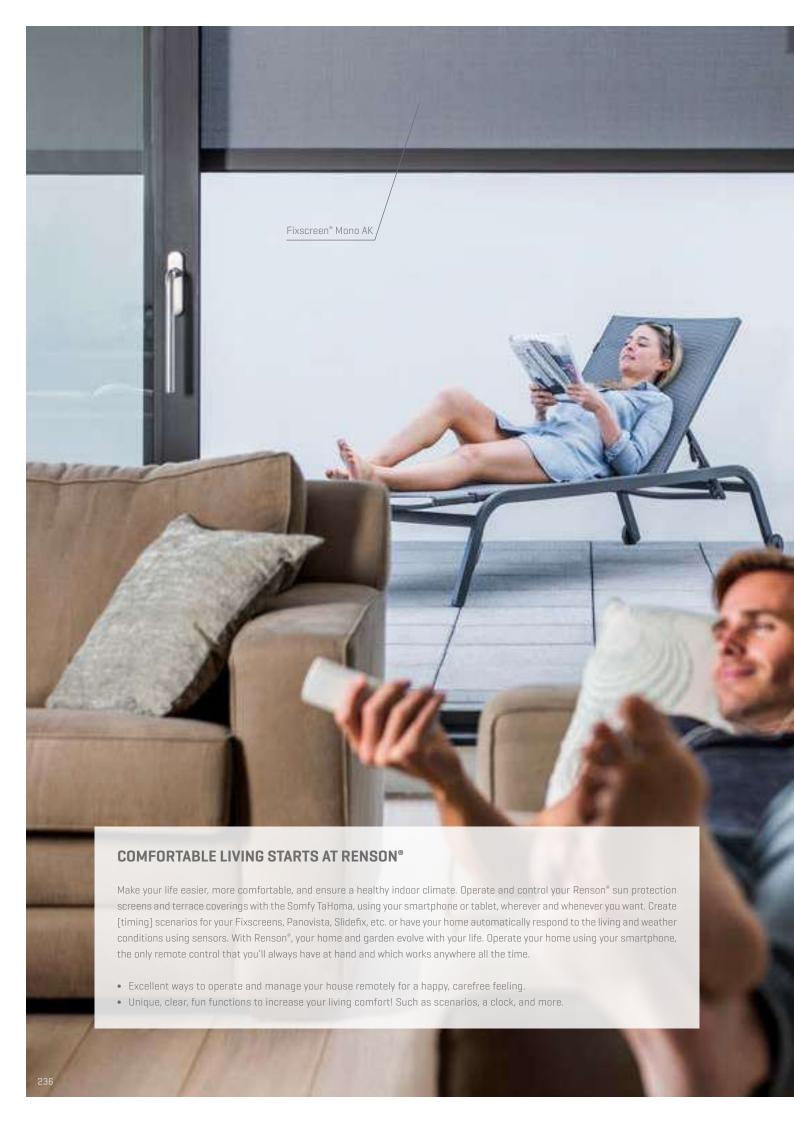
A solar sensor reacts to the intensity of the sun and will thus control the sun protection fabric. The inside temperature is always kept under control, even if you are not at home. The wireless sensor can be used on the façade outside or inside on the frame and is easy to install and set.



Wind- & sun sensor

A wind & sun sensor reacts to both the intensity of the sun and the wind speed.

Sensor Selector? See p. 240



CONTROL

Comfort is the keyword when it comes to operating sun protection screens. You can choose between several different options depending on the local use, the accessibility, and the style of the interior.



Wireless wall switch

Local wireless wall switch powered with batteries. You can put this switch anywhere on the wall you like, thanks to the wireless design. Simply affix the adhesive strip on the back of the switch to the surface.





Wireless wall-mounted remote control

You can operate the sun protection screens without getting out of your sofa thanks to this handy, elegant remote control. One remote control can operate various screens at the same time.



Remote control

You can operate the sun protection without having to leave your seat thanks to a handy and elegant remote control. The various screens can be operated simultaneously with a single remote control.



Smartphone control

Operate and control your Renson® sun protection screens and terrace coverings with the Somfy TaHoma, using your smartphone or tablet, wherever and whenever you want. Create [timing] scenarios for your Fixscreens, Panovista, Slidefix, etc. or have your home automatically respond to the living and weather conditions using sensors.



Group operation with Touch controls

Group operation with touchscreen that simplifies an intuitive interaction and that gives you a new sensation.

- Simply press the screen to select, operate, add, or save all the products you have in your home.
- Operate your applications individually or in a group.
- Configure your controls according to the layout of your home.
- Create scenarios.
- Operate with a natural movement.

Control Selector? See p. 240



SELECTOR MOTOR & ACCESSORIES

			TRADITIONAL CONTROL					
Type of control	Via wired wall switch	(max. 2 per switch)	Via radio-controlled hand or wall transmitter					
Linking with sensors	Not linkable	with sensors	Linkable with sensors					
Obstacle Detection	✓	-	-	-	-			
Warranty (year)	7	5	5	5	7			
Result	Detecto RMSF	Somfy Mechanical	Somfy io	Somfy RTS	Somfy Solar RTS			

		HOME AUTOMATION									
Type of control		Wired home automation system (KNX, Niko Home Control, Qbus, Loxone,) Wireless home automation system (Somfy TaHoma) + wireless hand or wall transmitter									
Linking with sensors		Linkable with sensors									
Obstacle Detection	✓	-									
Warranty (year)	7	5	5	5	7						
Result	Detecto RMSF	Somfy Mechanical	Somfy io	Somfy RTS	Somfy Solar RTS						

SELECTOR SENSORS & CONTROL

			SOMFY io											
	Sensors linked?			Y	es			No						
CTION	Type of sensor Wind		Si	un	Wind	I+Sun								
SENSOR SELECTION	Sensor power supply	Mains supply (230V)	Wireless (battery)	Mains supply (230V)	Wireless (battery)	Mains supply (230V)	Wireless (battery)							
SE	Result	Eolis io	Eolis Wirefree	-	Sunis Wirefree io	Soliris io	Eolis io & Eolis Wirefree io	-						

z	# of screens controlled	1 screen	2-5 screens	+ 5 screens	1 screen	2-5 screens	+ 5 screens
SELECTIO	Hand transmitter	Situo 1 A/M io	Situo 5 VAR a/m io	Nina io / Nina Timer io	Situo 1 io	Situo 5 io	-
CONTROLS SELECTION	Wall transmitter	-	-	-	Smoove origin io / Smoove 1 io	Smoove 4 origin io	-
0	App-control		Tal	loma Smart Home			



SELECTOR SENSORS & CONTROL

		SOMFYRTS						
	Sensors linked?	Yes					No	
CTION	Type of sensor	Wind		Sun		Wind + Sun		
SENSOR SELECTION	Sensor power supply	Mains supply (230V)	Wireless (battery)	Mains supply (230V)	Wireless (battery)	Mains supply (230V)	Wireless (battery)	
SE	Result	Eolis RTS	-	-	Sunis Wirefree RTS	Soliris RTS	-	-

z	# of screens controlled	1 screen	2-5 screens	+ 5 screens	1 screen	2-5 screens	+ 5 screens
SELECTION	Hand transmitter	Situo 1 Soliris RTS	Situo 5 Soliris RTS	-	Situo 1 RTS	Situo 5 RTS	Telis 16 RTS
CONTROLSS	Wall transmitter	-	-	-	Smoove origin RTS / Smoove 1 RTS	-	-
	App-control	TaHoma Smart Home					

		SOMFY MECHANICAL					
No.	# of screens controlled	1 motor	or relay	2 motors of relays			
SELECTION		Surface-mounted	Concealed	Surface-mounted	Concealed		
CONTROLSSI	Wall switch with fixed endpoint	Inis (fixed point)	Smoove uno (fixed point)	-	Smoove Duo (fixed point)		
03	Wall switch with auto zero setpoint	Inis (auto point)	Smoove uno (auto point)	-	Smoove Duo (auto point)		



ACCESSORIES

There is a vast choice of different types of motors, operations and sensors, everything to enhance comfort. Opt for additional ease of installation thanks to the following accessories.



Adjustment cable Detecto RMSF

Thanks to an adjustment cable, tubular motors can be adjusted in a safe and easy way. These are suitable for adjusting tubular motors and if needed, reset the end points. There are adjustment cables available for Detecto Rensonmotor Safety First.



The Set & Go installation tool applied together with io-homecontrol

This handy installation tool allows you to commission easily the IO motors with the help of your computer, laptop, notebook or tablet with a Windows operations system.



Additional cable length

It is possible to extend the motor cable if this is required by local conditions. By default, the cable length is 3 or 5 meter, depending on the motor type. This cable length can be extended to 10 metres for an efficient connection to the power network. Should the length of the cable still not suffice, a Hirschmann plug may be chosen for a safe and durable connection.

STANDARDISATION

EN 13561

Sun protection must meet the European standard EN 13561. This standard deals with the performance and safety requirements that apply to the construction, transportation, installation, control and maintenance. This performance is evaluated based on different tests and/or calculations.

This standard has two objectives:

- Defining the technical performance of the product. These technical performances must facilitate evaluation of the safe application of the products.
- 2. From the basis for CE marking. The CE marking only relates to the features imposed by the regulator for placing a product on the market. From 1 July 2013, producers are requi-

red to provide a declaration of performance with CE marked products, also referred to as a Declaration of Performance. The declaration of performance is created by the manufacturer and provides information about the most important performances of the product and its intended use.



EN 13561

PRESSURE TESTS

To determine the wind class of the sun protection fabric and to find out the corresponding wind class [according to EN 13561], pressure tests are performed. This is a trial in a wind box in accordance with the NBN EN 1932. Thanks to a fan and a system of electrically operated valves, an under pressure and overpressure is simulated in the wind box.



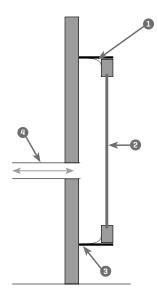
335 Pa



max. 600 Pa

Result

The pressure is gradually increased. At a pressure of 600 Pa, the zipper escaped from the side guiding channel without breakage.



Vertical cross-section of the wind box:

- Seal
- 2 Sample
- 3 Windframe
- Connection to a fan (≥ 10 000 Pa) and measurement of the under- and overpressure

Wind class				
Nominal test pressure p (N/m²)	< 40	40	70	110
Safety test pressure 1.5 p (N/m²)	< 48	48	84	132





WIND TUNNEL TESTS

In addition to pressure tests, wind tunnel tests are extremely suitable for determining the wind resistance and durability of the sun protection fabric. Wind tunnel tests are not standardised. Nevertheless, Renson conducts wind tunnel tests as they offer more truthful results. This is the base for the warranty that we offer on our products.

During the Fixscreen-tests, the sun protection is exposed to wind speeds up to 130 km/h. This is equivalent to a hurricane force of 12 Beaufort. However, during the tests, the fabric remains tautly tensioned, there is no opening between the guide and the fabric and the zipper remains in the guiding channels.



Non-windproof fabric sun protection at 30 km/h



Fixscreen® at 130 km/h

	В			BEAUFORT SCALE
Beaufort	Description	Average speed m / s	Average speed km/h	Followed
0	Windless	0 - 0,2	< 1	No wind impact. Smoke rises straight up or almost straight up.
1	Pretty weak	0,3 - 1,4	1 - 5	Wind direction can be easily deduced from the smokes plumes, but not from the weathervane
2	Weak	1,5 - 3,4	6 - 12	Wind noticeable in the face, leaves are shivering, the weathervane starts to turn
3	Pretty moderate	3,5 - 5,4	13 - 19	Waving flag and waving leaves
4	Moderate	5,5 - 7,4	20 - 27	Fluttering dust is a nuisance to the eyes. Messy hair.
5	Pretty strong	7,5 - 10,4	28 - 37	Bushes shiver, crested waves on the lakes and canals
6	Powerful	10,5 - 13,4	38 - 48	Umbrellas are difficult to hold onto, large branches are swinging and electrical wires are shrieking
7	Hard	13,5 - 17,4	49 - 62	It is difficult to walk in against the wind. The trees are swaying.
8	Windless	17,5 - 20,4	63 - 73	Moving forward is very difficult. Small branches break off.
9	Stormy	20,5 - 24,4	74 - 87	Chimney caps, roof tiles and antennas blow away.
10	Heavy storm	24,5 - 28,4	88 - 102	Adults are blown away. Major damage to buildings.
11	Very heavy storm	28,5 - 32,4	103 - 117	Enormous damage to houses and forests.
12	Hurricane	> 32,5	> 118	Destruction and demolition.



WARRANTY

Renson only works with high-quality materials. You can therefore enjoy an extended warranty period on all components and your peace of mind is quaranteed.



- 5-year product warranty for normal household use and regular maintenance. (for Panovista Max subject to a maintenance contract)
- 5-year warranty on gloss level on aluminium profiles.
- 5-year warranty on the electronic control j (Somfy® motorisation & automation).
- 5-year warranty on the fabric collection. (Crystal window 2-year warranty) [Acrylic fabric Orchestra [Max] 10-year warranty].





- 7-year warranty on Fixscreentechnology for Fixscreen, Fixscreen Minimal, Panovista, Topfix (VMS) and Topfix Max zipper remains in the side guiding channel - optimal attachment of the zipper to the fabric
- 7-year warranty on Panovista Max-technology in case of annual mainenance.
- 7-year warranty on Detecto motor
- 7-year warranty on Fixscreen Solar kit (motor, battery & solar
- 5-year warranty on Fixscreentechnology for Slidefix and freestanding applications of Fixscreen, Fixscreen Minimal and Topfix Max.



· 10-year warranty on coating of aluminium profiles.

The warranty period starts from the production date and only applies to the actual product, not on the installation thereof.

The warranty only applies when the product is used and maintained in accordance with the instructions of the user manual. The warranty becomes void after incorrect or abnormal use of the product.

Please always provide the serial number when reporting problems.

Also see the warranty certificate.

MAINTENANCE

Sun protection fabric requires little maintenance. You add many years to the service life of your sun protection by handling it with care.

Some general guidelines:

- Should the fabric become wet because of an unexpected shower, you can simply roll up the fabric and roll it down later on to dry
 on better weather. Avoid leaving the fabric rolled up for more than three days to prevent moulding and stains.
- Before cleaning, first remove loose dirt with a brush. You can subsequently remove the remaining dirt with a cleaning product
 (avoid corrosive products) and lukewarm water. Always rinse the fabric after cleaning. Avoid cleaning in fierce sunlight: stains may
 remain on the fabric when the soap water dries quickly.
- We do not recommend using high pressure devices
- Do not use any aggressive abrasives.
- The hinges and rotating parts must be lubricated annually. Use a dry lubricant for this [Teflon].
- Regularly check your screen for twigs, leaves, etc. and remove these. Maintain this product with due diligence. As manufacturer,
 we recommend regular technical inspection by the installer: annually in case of non-residential building and every two years for
 private sun protection fabric.
- We recommend semi-annual maintenance for non-aggressive environments. For aggressive environments (sea, heavy industry ...) we recommend frequent maintenance, about 4 times a year.
- · Always use the manufacturer's original spare parts.
- * See our user manual.

Easy maintenance with the Renson Maintenance Set

- The texture is made of powder coated aluminium. An annual cleaning with the **Renson Maintenance Set** products ensures years of maintaining the intense colors and gives extra protection against acid rain, sea air and UV rays. Maintenance is designated at least 2 x per year in coastal areas and wooded environments.
- The Renson 'Clean' is a concentrated product with strong cleansing and degreasing properties for the most common natural pollutants, such as dust, greasy deposits, grease stains, moss, insect marks, etc. This product is not comparable with most cleaning products.
 Because of its in-depth action, the dirt is 'lifted', so to speak. This product can also be used for cleaning polyester fabric roofs and vertical fibreglass screen fabrics. After cleaning, you must protect the aluminium texture with Renson 'Protect'. It leaves a protective film that facilitates subsequent cleaning of the surface area with a simple swipe of the surface and realises it with minimum use of Renson

'Clean'. It also protects the aluminium against acid rain, sea air, UV rays and thus ensures that the intense colour is retained.

 Both products must not be used in direct sunlight or hot weather. The fast drying of the product could leave stains on the structure or the fabric. Never use corrosive or aggressive products, scouring pads or other abrasives. Furthermore, never use high-pressure devices.





WHY RENSON®?

Renson® sets the bar high and is always one step ahead of the future. And you can get a piece of this. Choosing for Renson® is not a coincidence?

You choose for Belgian quality

You get the warranty that every element is produced durably in accordance with the strictest quality requirements. This allows you to enjoy your investment for a long time. Designed & Made in Belgium.



You draw the map of innovation

You like to join the latest technologies? So do we. Our substantial R&D-team continuously develops new products and possibilities. Before our products enter the market, they are subjected to sound thorough durability tests. At Renson®, you always choose the best of the best and you know that it works.



Your prefer 100% customization

We speak your language. Thanks to the extensive product range, Renson® offers a customized solution according to your situation, your taste, your needs and your budget. Our specialists pilot and guide you through all the options.



Your believe in the power of communication

Not only do we have the know-how, but we also share this knowledge. For example, you can enter our EXIT 5 show-room without any obligation, you can find us on the most important [inter] national fairs and our website offers the latest inventions and technical information. Do you have an urgent question? Please contact us by telephone.



You choose for trust

You opt for a reliable partner with tons of experience, which is also financially sound. Since its founding in 1909, Renson® has always been a family enterprise where entrepreneurship, perseverance and dynamism are key.



You choose for experts in sun protection and ventilation

Renson® relies on a powerful and particularly extensive dealer network. Each and everyone is a professional with years of experience. There is always a Renson® specialist in your area who speaks your language. Due to continuous training, we remain abreast with the latest products and techniques.



You are not alone

Renson® commits to advising you, from start to finish. And it does not end with a perfect installation, you can keep on relying on the expertise of our professionals.







RENSON® ACADEMY

Why?

The proper functioning of our products does not only depend on the quality, but also on the correct installation and adjustment by the installer. As manufacturer, we also ensure that these installers deliver good work.

How do we manage this?

Installers receive a thorough technical training at our training centre. Our experienced installers show them how to install everything correctly.

The result?

Properly working systems that ensure the comfort and health of the residents and meet all the technical and quality requirements.

More info?

www.renson.eu/training

RENSON® PRE- & AFTERSALES

Whv?

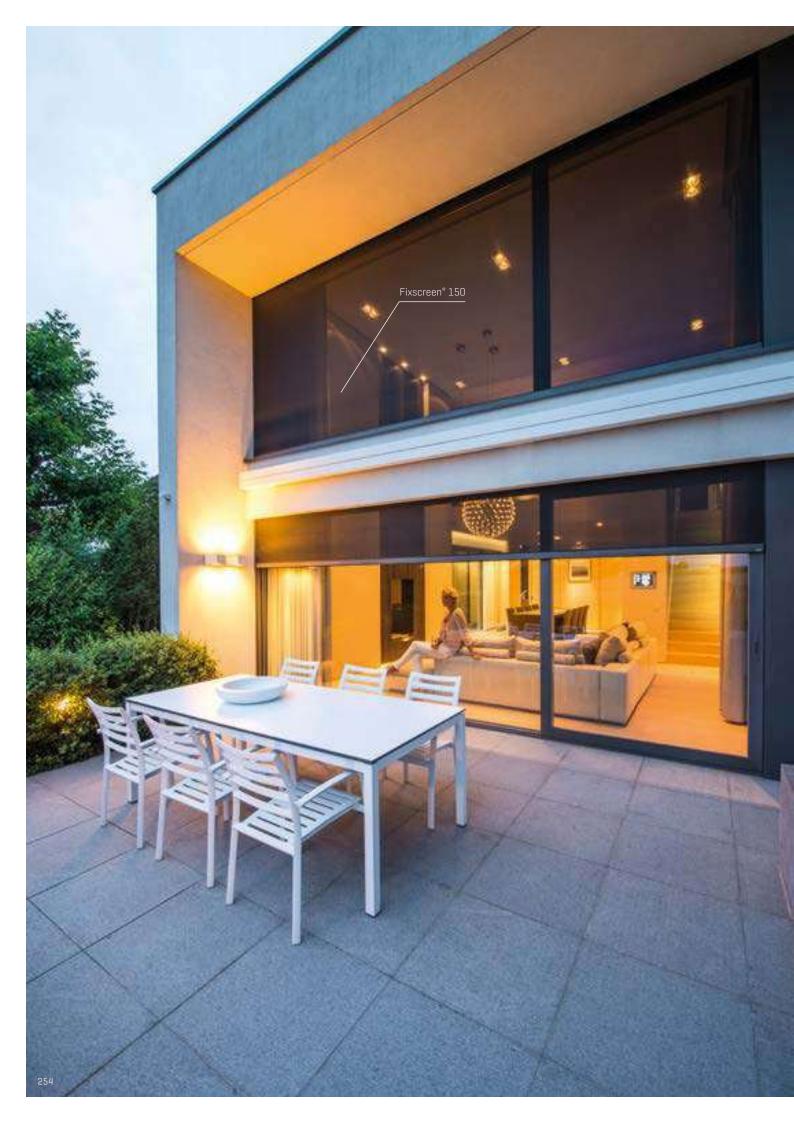
A specific project? We look for a suitable solution together with you. We can also help you with questions about installation.

How do we manage this?

A team of technically trained employees is ready with a suitable answer to all your questions.

Result?

For every project, there is a suitable solution and an excellent after-sales service.



LEGEND

Adjustment cable

Thanks to an adjustment cable you can set up tubular motors in a safe and simple way. These are suitable for adjusting tubular motors and if needed, reset the end points. Adjustment cables are available for Detecto Renson motor Safety First, Renson motor 24V and Becker SMI motors. See page 243 for further explanation.

Aluminium

Aluminium is a light but strong material, with a long service life that is ideal for modern architecture. It lends itself perfectly to slender profiles and facilitates large over-tension. It is also 100% recyclable and very easy to maintain.

Anndization

Anodization is one of the most commonly applied finishes of aluminium. Anodization is an electrolytic process whereby the natural tendency of aluminium to form an oxide film on the surface area is enhanced by electrolytic processing. In doing so, the workpiece is connected as anode The resulting coating has protectively, decoratively and functionally enhanced features.

Bottom bar

The bottom bar manufactured from extruded aluminium is heavily weighted with a rod of galvanised steel. It is encased in PEfoam to prevent contact between the aluminium and steel. For a perfect seal with the sill, the bottom bar is fitted with a plastic sealing strip.

Bnx

The box consists of extruded aluminium profiles. The ends are provided with side-supporting endcaps that support the roll-up mechanism and are fitted with pins to slide the box on to the side guiding channels. The box is closed by means of a removable profile which hinges in the fixed cupboard profile and can be disassembled.

Box extension

Box extension can be requested for certain installation methods. The box is extended along 1 or 2 sides and the box profiles continue in relation to the side-supporting end caps. This can be interesting for aesthetic reasons where this box extension fills an empty space above the window next to the screen or where 2 box extensions are formed into one corner.



Cable feed

The location of the cable feed is related to the choice of product and installation method. Every location has a specific code and can be located left or right. The position from which to determine the choice of cable location left or right is indicated on the technical drawings in our brochure by means of the image below of a face.

Cable length

It is possible to extend the motor cable if the local conditions require it. By default, the cable length is 3 or 5 meters, depending on the motor type. This cable length can be extended to 10 metres for an efficient connection to the power network. See page 243 for further explanation.

CE-marking

The EN standards lay down the rules with regard to the products in the market and form the basis for a CE marking. With the CE marking we show that the products meet the legal requirements in the areas of safety, health and the environment.

Click&Safe

In case of hidden installation, Click & Safe ensures a safe installation of the fabric tube. During installation, the fabric tube simply clicks to the box, leaving the installer free to safely complete the installation.

Confection

Fabrics are cut mechanically, thermally or ultrasonically. Fabrics are thermally welded or via high frequency.

Confection side (CF1 and CF2)

A fabric has two sides. In case of woven fabrics, there is a small difference in the weaving.

Confection side 1 is the top of the fabric sample in the Renson fabric sample swatch. This is the exterior view of the screen fabric. Confection side 2 is the bottom of the fabric sample in the Renson fabric sample swatch. The confection side is marked on all technical drawings.

Connect&Go-technology

The Connect&Go-technology consists of a patented, splashproof electrical connector in two parts: a female part in the box and a male part on the fabric tube. The Connect&Go-technology guarantees a quick, safe and simple installation of the fabric tube, the motor and the fabric. Dismounting the fabric tube barrel is also efficient. The Connect&Go-technology consists of a patented, splash proof electrical connector in two parts: a female part in the box and a male part on the fabric tube barrel package. See page 23.

Coupled

Coupled screens are two different screens in which case the box runs through. In the middle, there is a coupling side guiding channel in which both fabrics are guided. These coupled screens are powered by 1 or 2 motors.

In case of motorisation with 1 motor, the screens are operated together and they roll up and down together.

With motorisation with 2 motors the screens can be operated together, but also separately. Ideal for sliding doors or sliding windows

Declaration of Performance (DoP)

DOP stands for Declaration of Performance or Performance DOP. This mandatory declaration is compiled by Renson and proves that the sun protection meets the performances that are required for the specific application thereof. These performances are described in the CE standard. The CE mark is therefore also in the DOP-declaration.

EN 13561

Solar shading must comply with the harmonized standard NBN EN 13561 (Awnings - Performance requirements including safety) which was registered as a Belgian standard by the Belgian Institute for Standardization (BIN) on 9 September 2014. (also see p 244)

EN 14501

Thanks to the standard NBN EN 14501 (Sunshades and shutters – Thermal and visual comfort – Performance features and classification) it is is possible to divide the fabrics into classes depending on their performance. The classes are defined with respect to their impact on the thermal and visual comfort (0 = very little impact, 4 = pronounced positive impact). This norm can therefore serve as additional resource for the choice of the screen fabric that best fits the special wishes of the client.

Fabric cord

At the top and bottom, the screen fabric is attached with a cord in a fabric eyelet or with a fixed cord (piping or strip). The screen fabric is thus firmly contained in the fabric tube and the bottom har

Fabric tube

The fabric tube is manufactured from galvanized steel and fitted with a unique recessed groove to limit compression of the fabric eyelet. As a result, the horizontal line formation is greatly reduced.

Fabric tube end piece

The patented fabric tube end pieces are conical [cone shaped] to compensate for the thicker ends of the rolled up zipper and thus ensure a perfect roll-up of the fabric.

Finished height

This dimension is important to determine the order size of the screen. The finished height is equal to the total distance between the bottom of the side guiding channels and including the box in case of vertical screens.

Exceptions:

- When brackets are used (with IM 5 and IM 9) the finished height is exclusive of the bracket.
- In case of Slidefix, the finished height is from the top guide to the bottom guide (excl. mounting bracket)

Fire resistance of a fabric

The fire resistance indicates the extent to which the fabric responds and performs in case of fire.

Fixscreen-technology

The Fixscreen-technology guarantees a windproof, taut and wrinkle-resistant fabric in wind speeds up to 130 km/h. Thanks to the optimal attachment of the zipper to the fabric, it remains in the side guiding channel in case of high wind speeds. See page 20 for further explanation.

Freestanding

Freestanding means that there is no underlying construction behind the sun protection or underlying construction behind the window.

Note that the maximum wind speeds can be lower in this case.

Gloss level

Powder coating colours are available with various gloss levels: RAL: gloss level of 70%, MATT: gloss level of 30%.

Hirschmann-plug

Hirschmann plugs ensure an easy, high quality, safe and durable coupling of motor cables if the supplied cable length is not sufficient. At the same time, the plug ensures that there is no water infiltration during bad weather conditions, that it does not detach during heavy vibrations and that no hazardous substances can penetrate the plug. The Hirschmann plugs can be delivered assembled or non-assembled and are available in two versions [4 or 5-wire], depending on the motor type.

Inclination angle

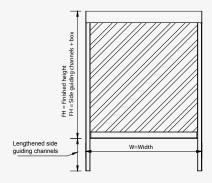
For horizontal sun protection, the inclination angle is requested to determine which type of fabric can be used and which dimensions can be realized, in order to offer the best technical solution, for instance to prevent water sagging and/or wrinkling.

Insect proof

When closed, insects do not get a chance to enter your home. There is no gap between side guiding channel and screen. A bottom bar with a sealing strip ensures a perfect connection to the sill. This means that intensive ventilation can take place during the day as well as at night.

Lengthened side guiding channels

From an architectural point of view, in order to achieve a perfect connection to a sill, the side quiding channels can be extended. The additional length of the side quiding channels can be defined independently of each other. Note that the height of the fabric is manufactured according to the specified finished height of the screen, i.e., excluding the additional extension of the side guiding channels.



Linked

Linked screens means that two screens are installed next to each other, without a connection between the two boxes. Both screens have their own motor, own box and own side guiding channels and are linked possibly using mounting feet. In doing so, expansion must be taken into account.

Powder-coating

Powder coating is an electrostatic coating process in which compressed air, negatively charged powder is sprayed onto a positively charged workpiece. This keeps the powder temporarily sticking, after which it is melted or fused in an oven. Powdercoating is an environmentally friendly process as during the paint process, no solvents are released because no chemical additives are needed to attach the powder to the aluminium profiles.

Powdercode colours

Powdercode is a coding system to define colors and coatings.

Pre-anodisation

Pre anodization is a pre-treatment that protects the aluminum profiles against aggressive environments such as coastal areas, heavy industries, etc. It is a thin, non-sealed anodised layer, which is used separately for powder coating in an anodization line and avoids filiform corrosion

Precontraint method

The Precontraint method is the production technique for Soltis polyester fabric. After the weaving process, the fabric is pulled to high tension in both directions and is fixed with a liquid PVC.This provides the fabric with a great deal of dimensional stability, so that it cannot become deformed under load. The same technique also ensures that the canvas has the same thickness over the entire surface. The surface area of the fabric is also dirt-repellent.

All fabrics can be printed in accordance with personal design.

Projection

Applicable to horizontal screens. The projection is the total distance between the bottom of the side guiding channels and including the box. This measure is important to determine the order size of the horizontal screen.

PVC side quiding channel

In every side quiding channel, there is a PVC side quiding channel with co-extruded wear-resistant top layer (also see Smooth-technology]. This PVC side quiding channel is provided with buffer zones to compensate wind gusts. The zipper, which is attached to the screen fabric, is pushed into this PVC side guiding channel and the screen fabric is retained this way. Sufficient tolerance has been provided between the fabric, aluminium side guiding channels and the PVC side guiding channel to ensure smooth guidance. See page 23 for further explanation. (Not applicable for Vegascreen)

Renson® standard colours

Renson®'s standard colours are the most requested powder coating colours and are available as standard without additional costs [see page 232].

Roll width

Each canvas is available in a certain roll width. The welding seam will be visible if the fabric dimensions are bigger than this roll width. (see also welding seam)

Side edges of fiberglass fabrics that do not have a zipper are standard fitted with a seal strap. This is a transparent reinforcement band to prevent fraying.

Seaside Quality A

Pre-treatment in accordance with Seaside Quality A is recommended. Seaside Quality A is a way of pre-treatment on the powder coating line where at least 2gr/m² are stained before powder coating. A thorough cleaning on a regular basis is required here, which limits the chance of filiform corrosion below the coating compared to standard coated profiles.

Self-regulating

The Fixvent Mono AK/UT $^{\text{EVO}}$ is the only screen that provides ventilation in addition to sun protection. Fresh air is supplied to your home through the ventilation flap in the inside profile. The integrated self-regulating valve plays a very important role in this: it reacts automatically to pressure differences, and therefore guarantees a constant flow rate and a draft-free supply of fresh and healthy air even at high wind pressures.

Side guiding channel

The side guiding channels consist of multiple extruded aluminium profiles to facilitate easy mounting and dismounting.

Smooth-technology

The Smooth-technology includes a patented, coextruded, wear-resistant top layer in the HPVC innerrail. This layer consists of Teflon and guarantees a smooth, durable and silent operation of the zipper in the HPVC innerrail. This ensures a taut and wrinkle free fabric and also ensures that the fabric stays windproof in all positions. See page 23 for further explanation.

Symmetric zipper

For products equipped with Fixscreen-technology, the sun protection fabric has a symmetrical zipper on both sides. This symmetrical shape ensures that the fabric absorbs the wind load well. As a result, the fabric is securely held in both side guiding channels and remains windproof in all positions. See page 20 for further explanation.

U-value

The U-value or insulation value indicates the extent to which a product is a good insulator. A high U-value indicates a thermally poorly insulating product, a low U-value means that the product thermally insulates well. Therefore: the higher the U-value, the better.

Waterproof

Screen fabrics cannot be perfectly waterproof except the blackout fabrics. As with all fibreglass yarns, there are small holes between the threads. This is technically described as the opening factor of a fabric.

Welding seam

If both width and height are greater than the fabric tube width, it may occur that a weld seam is visible so that both fabric parts can be connected to each other. The position of the welding seam differs from fabric to fabric and from the dimensions of the fabric. The welding seam height is always calculated from the lowest point of the frame.

Width

This dimension is important to determine the ordering size of the screen. The width consists of the total width of the box, including the side guiding channels.

Exceptions:

With the Slidefix, the total width means the width of the guiding channels including the box(s). For more information, see p. 228 $\,$









WE'D BE HAPPY TO HELP YOU!

Our head office - the elegant building designed by the late architect Jo Crepain, which has been the visiting card of our company for many years now - is now being renovated. The bottom part of the building now has an imposing glass façade. Behind the façade, there is a new 'Customer Centre' with reception rooms for customers, conference rooms, and an auditorium, where large groups of more than 300 people can participate in presentations. In case of smaller groups, this auditorium can also be divided into 3 separate rooms.

The highlight of the project is the new showroom of 1250 m², where professional customers as well as private individuals can be accommodated. Apart from a showroom for Renson®'s various innovative solutions and concepts, it is planned to make this room a knowledge centre, where customers can walk in and ask questions about ventilation, heating, sun protection, ventilative cooling, acoustics, interior, etc, In short: everything to provide the home with all the necessary comfort. There is also the possibility to view the solutions in practice in show houses located nearby.

For more information about the network of Renson® ambassadors, please visit our website at: www.renson.eu

RENSON®: YOUR PARTNER IN VENTILATION, SUN PROTECTION AND OUTDOOR CONCEPTS

• Creating healthy spaces

From 1909, we've been developing energy efficient solutions assuring a healthy and comfortable indoor climate. Our headquarters - built according to the 'Healthy Building Concept' - is a beautiful example portraying our corporate mission.

• No speed limit on innovation

A multidisciplinary team of more than 90 R&D employees continually optimize our products and develop new and innovative concepts.

• Strong in communication

Contact with the customer is of the utmost importance. A group of 100 in-the-field employees worldwide and a powerful international distribution network are ready to advise you on site. EXIT 5 at Waregem gives you the possibility to experience our products on your own and provides necessary training for installers.

• A reliable partner in business

We can guarantee our customers optimal quality and service thanks to our environmentally friendly and modern production sites (with automated powder coating line, anodisation line, uPVC injection molding machinery and mold making shop) covering an area of 95.000 $\ensuremath{m^2}.$





RENSON® Headquarters Maalbeekstraat 10, IZ 2 Vijverdam, B-8790 Waregem, Belgium Tel. +32 56 30 30 00 info@renson.eu www.renson.eu











