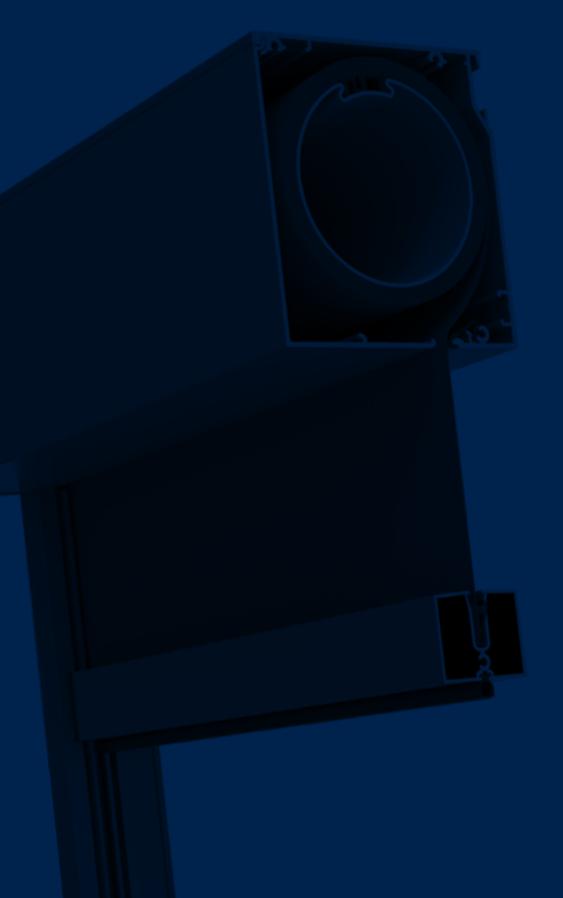
# MASTERING SUN PROTECTION

**FABRIC SUN PROTECTION** 







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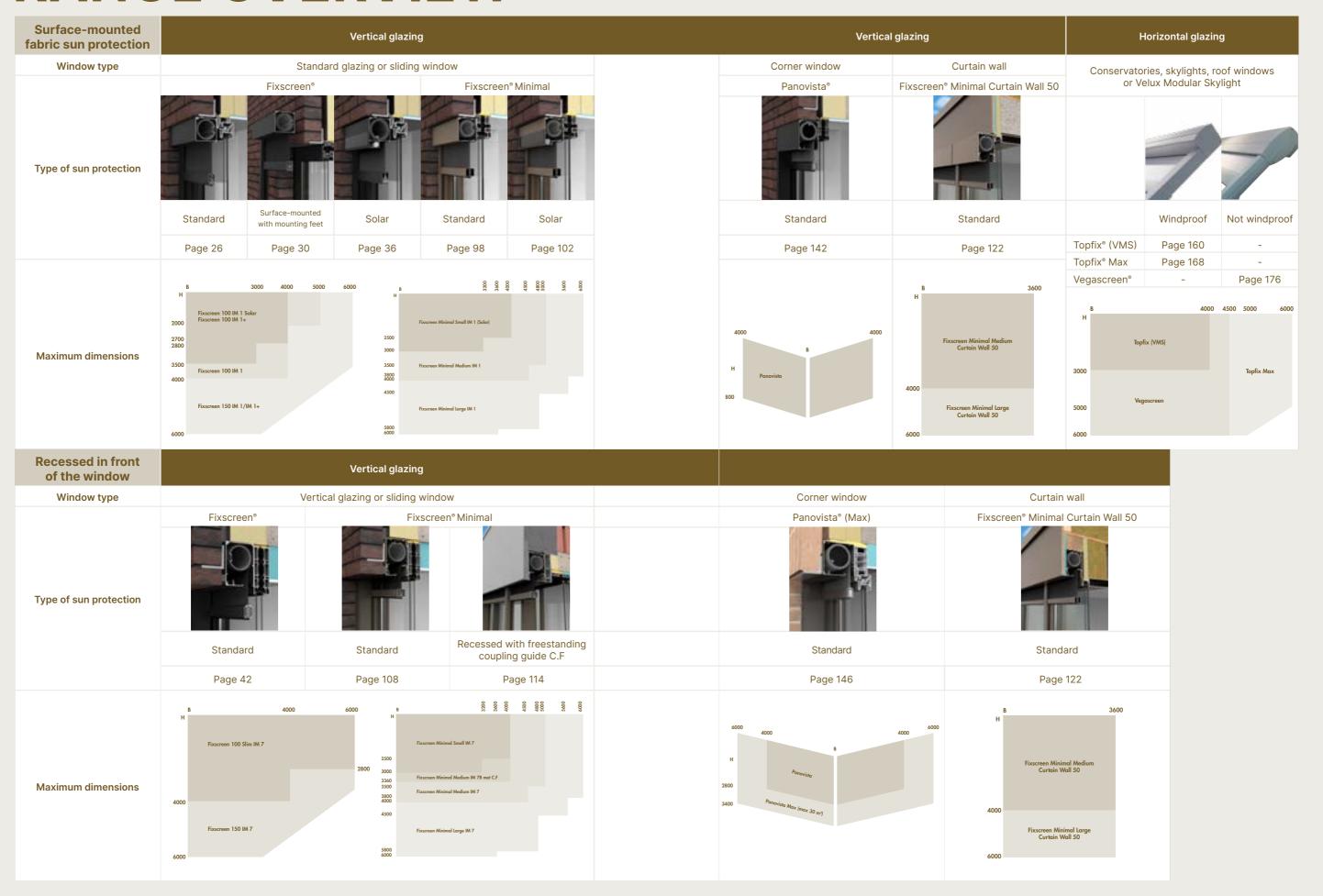
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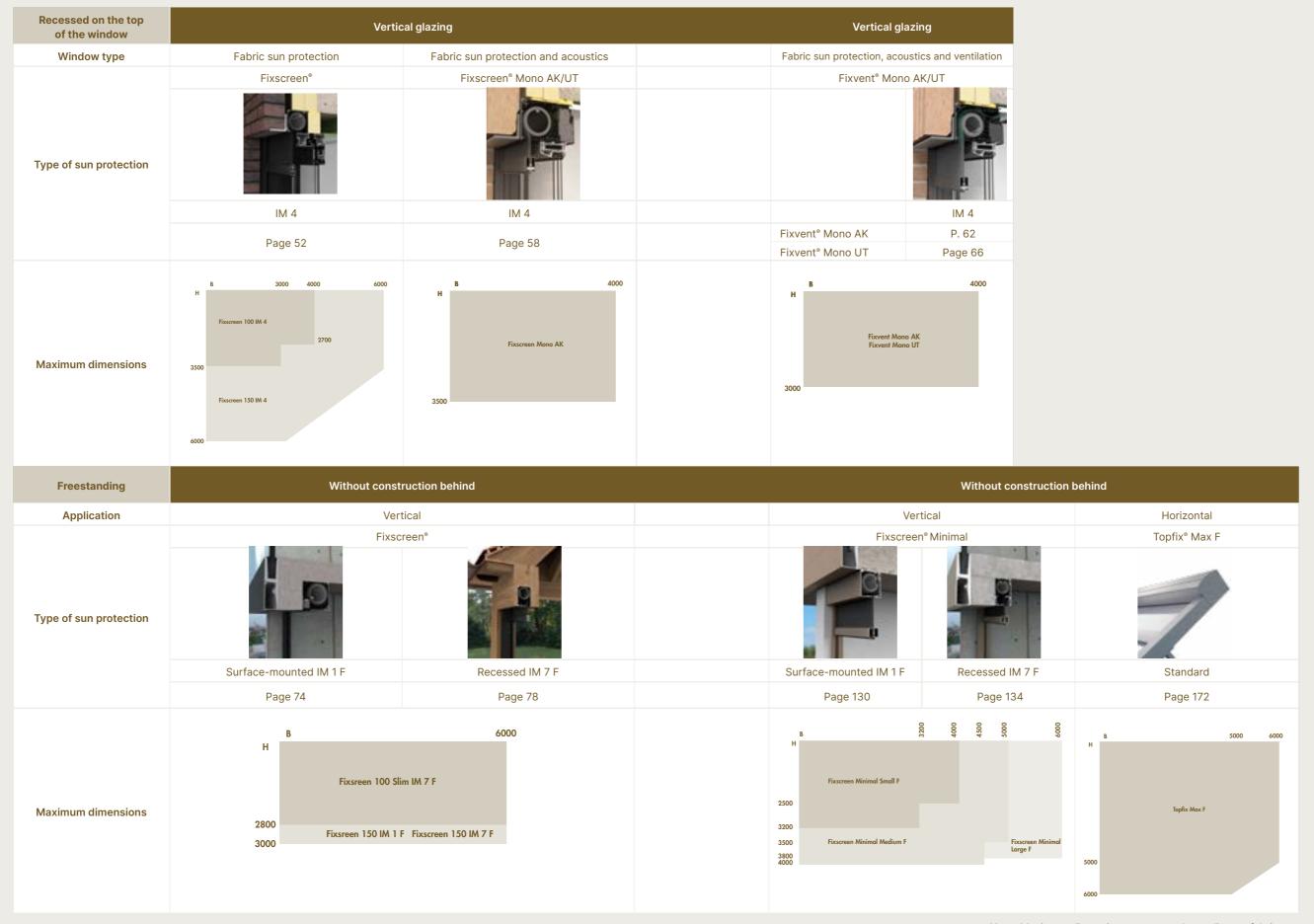


Our passion lies in creating innovative products and complete solutions that turn every home into a healthy and comfortable place to live. Our commitment to 'creating healthy spaces' is the foundation of everything we do.

Paul Renson

# **RANGE OVERVIEW**





Note: Maximum dimensions may vary depending on fabric type



Fabric sun protection efficiently and effectively keeps out the heat of the sun while ensuring natural light, outside views and easy control remain uncompromised.

# UP TO 10 DEGREES COOLER

Screens block the sunrays before they even reach the glass, making them an ideal solution for keeping indoor temperatures in check. With smart and correct use, fabric sun protection can keep indoors up to 10°C cooler.

# **SAVE ON ENERGY**

In summer, indoor temperatures are kept under control without the need for energy-guzzling air conditioning. In winter, with the screens up, maximal advantage is taken of the low-lying sun and the associated warming indoors, leading to energy savings all year round.

# **FOR EVERY PROJECT**

Renson offers fabric sun protection for surface areas up to 27.8 m², which are resistant to weather and wind thanks to Fixscreen-technology. There are also numerous installation options, with a suitable screen setup for every window and building.

# **DURABLE AND STYLISH**

Choosing aluminium means opting for durability and a stylish finish. It ensures the screens maintain a sleek appearance over the long term. The stylish finish of each component and the optimal integration into the façade – even with retrofitting – complete the package.

# **ALWAYS COMFORTABLE**

# VISUAL & AESTHETIC COMFORT

We all need natural daylight. It is crucial to our sense of well-being and health. And it's the ideal free lighting source. It also results in increased productivity in office buildings and better mental and physical health.

We try to let as much of this natural light into our homes as possible by having plenty of windows. At times of high intensity, however, and particularly in the summer, an excess of natural light can severely disrupt indoor comfort. But this can be perfectly avoided with the use of sun protection systems. In other words, sun protection ensures that we can continue to enjoy natural daylight and a clear view outside, without having to contend with the disruptive factors of direct sunlight entering our spaces.

A business case for green building, WGBC Report 2013

# **OUTSIDE VIEW**

Mental function & memory 10-25% Better

Phone calls 6-12% Better

Hospital admissions 8.5% Shorter

# **DAYLIGHT**

Mental function & memory

10-25% Better

Employees are 18% More productive

15-40% Increase in sales

### **SYSTEMS**

Productivity increased 23%
Thanks to better lighting 11%
Thanks to better ventilation 3%
Thanks to individual temperature control

People now spend almost 90% of their time indoors during the day. 50 years ago, people spent 90% of their time outdoors during the day!

# THERMAL COMFORT & ENERGY - SAVING SOLUTION

In addition to visual comfort, thermal comfort is one of the key arguments justifying the choice of dynamic fabric sun protection as an energy-saving solution.

When combined with windows, fabric sun protection offers an additional insulating property. It prevents overheating, which can result in significant energy savings during the summer as there's no need for active cooling. It also allows for the enjoyment of solar gains in the winter, with the added benefit of saving on heating costs.

Sun protection is more than just a product. A highquality, dynamic sun protection solution is a concept that manages both daylight and shading from the sun. Architects and builders can therefore benefit by integrating it into their designs as standard, for both new builds and renovations. And this will indeed become the standard for new constructions and extensions: from 2021, all new buildings must comply with nearly zero-energy (NZE) principles. The greatest energy benefits are achieved with dynamic and automated sun protection.

Various studies have proven the added value of dynamic sun protection:

- ESCORP EU-25 study (European study):
- Roller shutters and exterior and interior sun protection installed on at least half the buildings will result in a nearly 10% saving on energy consumption in buildings.
- TU Delft: TNO 2015 R10396 (Dutch study):
- Savings on heating energy due to the thermal insulation of sun protection. The calculated savings on heating energy can reach up to 17% for the reference terraced 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 reduction of more than 36% in cooling costs (all types of glazing and climate conditions in Europe). The highest savings are achievable with southwest facing façades, i.e. up to 65–70%.
- ESSO 2021 Study (European study):

"Solar shading – Synergising mitigation of GHG emissions and adaptation to climate change." Thanks to dynamic fabric sun protection, greenhouse gas emissions in MT CO<sub>2</sub>/year could be reduced by up to 58% more by 2050 than with air conditioning.

More daylight and a view outside lead to increased productivity and concentration, and a general sense of well-being.

RENSON

# **ENJOY ALL SEASONS**

Everyone wants a view outside and as much natural daylight in their home as possible, while keeping the indoor climate under control at the same time. Sun protection adds comfort in the warm summer months and during cold winters. Moreover, sun protection also positively affect your power consumption.

## CUSTOMISED COMFORT IN ALL SEASONS

New builds are increasingly well insulated and finished airtight. While that's great for your energy bill, on hot days the sun shines directly on the large windows and quickly makes it unbearably hot inside the house. Once that heat is inside, it becomes nearly impossible to remove it from a well-insulated building.

It therefore comes down to 'controlling' sunlight in such a way that you can enjoy it optimally. By keeping the outdoor sun protection retracted in winter, for example, so that you can then benefit from allowing the natural heat to warm the interior. In summer it is then a must to leave the screens down to regulate the interior temperature.

Summer



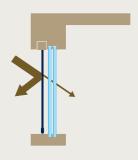
mer



Winter

## SUMMER DAYTIME

During the day, lower the sun protection to keep the indoor temperature manageable. This also avoids annoying reflections, furniture discolouration and the need for active cooling.



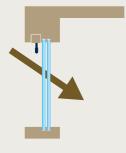
# SUMMER NIGHTTIME

At night, the sun protection and the window so your house can cool down sufficiently thanks to the cooler nights. So you start your day in a pleasantly cool house. And insects are still kept outside!



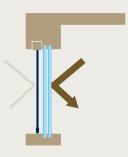
## WINTER DAYTIME

During the day, let in as much daylight through the windows as possible to warm your rooms in a pleasant and energy-saving way.

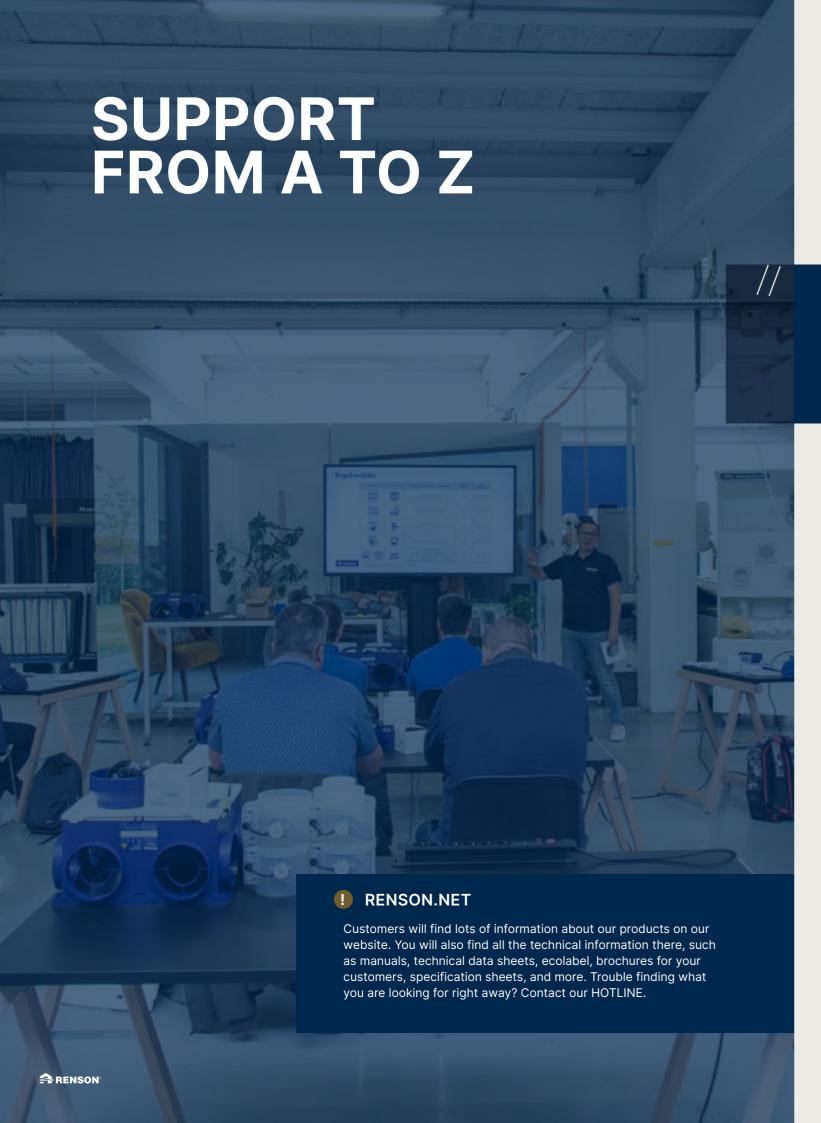


# WINTER NIGHTTIME

At night, lower the sun protection so the air between the sun protection and the window acts as insulation. This keeps the heat inside and you wake up in a comfortably warm house.







We are here for you (and your team)! In need of training? Technical assistance or an intervention at the construction site?



One phone call to the HOTLINE was enough to get my team back on track at the construction site. We promptly got the technical information we were looking for. Perfect service that saved a lot of time!



### Hotline

Not sure which solution is the best answer?
Struggling with a specific technical issue at the construction site? Contact one of our distribution partners or call a Renson helpdesk representative via the **HOTLINE** on +32 (0)56 30 30 30. If necessary, we will even send a Renson technician to your site. This will save you lots of time and give you a lot less to worry about!

# **Renson Academy**

Perfectly functioning ventilation system starts with correct installation. Good product knowledge and technical skills will save you a lot of time. You (and your team) are welcome to join us for:

- An update of your product knowledge
- A refresher of your skills
- · Learning new techniques

# ? Renson Services

Have you got a specific project? Renson Services will work with you to find a suitable solution for your unique project, in accordance with the applicable Eurocodes. A team of technically trained employees is at the ready to answer all your questions. You can also contact us for after-sales service or questions related to installation.



Limited in time? Distance too great? Our Academy is happy to come to you. In need of a tailored training course? Not a problem! Putting theory straight into practice will help you move forward! We would love to hear how we can support you. Register at:

renson.net > I'm a professional > Installer training



# WHY RENSON®?

At Renson, we believe that high-quality products and innovative solutions contribute to an energy-efficient, comfortable and healthy life. There is a reason why our baseline is 'Creating healthy spaces'. And in doing so, we start from a few basic principles.



## **MINIMALIST DESIGN**

We aim high when it comes to design. Renson solutions discretely fit into any project. The detailed finishing and seamless integration contribute to this fact.



# THE POWER OF INNOVATION

Our hunger for innovation is what drives progress. We achieve impressive results together by developing and applying innovative technologies.



# **ENDLESS CUSTOMISATION**

For a home or workspace, rustic or contemporary. Configuring a solution tailored to each customer and building is quick and easy.



## SUSTAINABLE ENTREPRENEURSHIP

We cannot build a healthy living environment without tending to a healthy world. From our choice of materials to our production and logistics, we are building a sustainable business.



# **ULTIMATE EASE OF USE AND MAINTENANCE**

Thorough engineering is a function of ease of use and minimum maintenance. From configuration and ordering to quick and trouble-free installation, with our digital platform, RIO, as its beating heart.





# **OVERVIEW PRODUCTS**

Panovista® (Max)

ertical fabric sun protection		Horizontal fabric sun protection	
Fixscreen®	22	Topfix® (Max)	15
Surface-mounted	24	Topfix <sup>®</sup>	15
Recessed in front of the window	40	Topfix® VMS	16
Recessed on top of the window	50	Topfix <sup>®</sup> Max	16
Recessed on top of the window		Topfix® Max Freestanding	17
with acoustics or ventilation	56	·	
Freestanding	72	Vegascreen®	17
Ready	84	, and the second	
Fixscreen® Minimal	90		
Surface-mounted	96		
Recessed in front of the window 1	106		
Curtain wall	118		
Freestanding	129		
· ·			

139

# VERTICAL FABRIC SUN PROTECTION

Vertical fabric sun protection blocks direct light from entering, both for standard windows, corner and sliding windows, glass-on-glass windows, as well as freestanding applications. The revolutionary Fixscreen-technology guarantees an extremely windproof and insect-proof fabric that can also handle very large areas of up to 27.8 m², or even up to a total maximal surface area of 30 m² with Panovista Max. Windproof vertical sun protection is extremely suitable for both new builds and renovations.

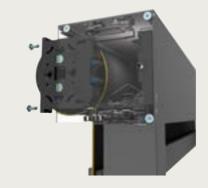




# **FIXSCREEN®**

### **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 130 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.



# FABRIC SET INSTALLATION AND DISASSEMBLING

Quick and safe installation and disassembling of fabric set thanks to Connect&Go-technology





# UNIQUE FABRIC TUBES

The standard fabric tube is fitted with a unique recessed groove to limit the impression of the fabric eyelet, with the aim of reducing horizontal lines forming in the fabric. The Fixscreen Minimal, Fixscreen 100 IM 1, Fixscreen Slim IM 7 and freestanding models also have a detachable click-profile for large widths. This ensures easy (dis)assembly when replacing the fabric.



# SIDE GUIDING CHANNEL FOR HIDING CABLES

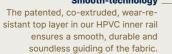
The open side guiding channel S is equipped with an extra channel in which the power supply cable for the motor can be concealed.



# THREE-PART SIDE GUIDING CHANNEL

The deep side guiding channel D for recessed screens ensures the accessibility of the head box after installation. This threepart guiding channel has a U-shaped base profile, allowing the fabric set to be easily disassembled without having to completely disassemble the side guiding channel itself. This eliminates the need for cutting or breaking, and maintains the water and wind tightness.





**Durable inner rail equipped with** 

Suitable for large glass surfaces

Fixscreen covers up to 22 m<sup>2</sup>

 $\mathcal{M}$ SMOOTH



### Fixscreen-technology guarantees high wind resistance High wind guarantee up to 130 km/h, thanks to the use of



Vast collection of fabrics and powder coating colours For the perfect match with all types of architecture



# FIXSCREEN® SURFACE-MOUNTED





# **FIXSCREEN®**

# **Surface-mounted IM 1**













Design	Fixscreen® 100	Fixscreen® 150		
Head box dimensions (HxD)	100 mm x 100 mm	150 mm x 155 mm		
Head box extension	500 mm			
Square	·	,		
Softline	·	,		
Retractable bottom bar	-	√ (to FH ≤2800 mm)		
Recessed fabric tube	v	,		
Base plate side guiding channel	At an angle	of 0° or 5°		
Wind resistance				
Wind classification EN13561:2004	3	3		
Wind tunnel test report	N°113-	25809		
Guaranteed wind resistance	Up to 130 km/h in closed posit	tion depending on dimensions		
Control				
Detecto Renson motor Safety First	~	,		
Somfy mechanic motor	v	,		
Somfy (Meastria*) IO radio-controlled motor	<b>✓</b>			
Certificates				
Declaration of Performance (DoP)	DOP-2015SC00002			
Durability test report	WTCB N°651 XE823 CAR4139			

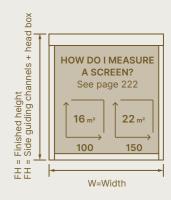
Dimensions		Fixscre	en° 100	Fixscre	en° 150	
Single screen						
	Min. width	700	mm	905 mm		
Fibre glass fabric Sergé / Natté	Max. width	4000 mm	5000 mm	6000 mm		
Polyester fabric Soltis Veozip Tuffscreen insect mesh	Max. height	4000 mm	2000 mm	6000	) mm	
Turiscreen insect mesn	Max. surface area	16 m²	10 m <sup>2</sup>	22	m²	
	Min. width	700	mm	905	mm	
Fibre glass fabric Privacy	Max. width	4000 mm	3000 mm	6000	) mm	
Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Max. height	2700 mm	3500 mm	6000	) mm	
,	Max. surface area	10.8 m <sup>2</sup>	10.5 m <sup>2</sup>	22	m²	
Blackout fibre glass fabric	Min. width	1000	mm	1000	) mm	
Satiné 21154	Max. width	4000	) mm	4000 mm	6000 mm	
Blackout polyester fabric Soltis Opaque B92	Max. height	2700 mm		4000 mm	2,600 mm	
	Max. surface area	11.2 m <sup>2</sup>		16 m²		
Coupled screen with 1 motor						
	Min. section width	800 mm		1810	mm	
Fibre glass fabric Sergé / Natté / Privacy	Max. overall width	6000 mm		6000	6000 mm	
Polyester fabric Soltis Veozip / Soltis Horizon 86 / Soltis Perform 92	Max. section width	4000 mm		5000 mm		
Tuffscreen insect mesh	Max. height	2700 mm		6000 mm		
	Max. total surface area	16.2 m <sup>2</sup>		22 m²		
	Min. section width	1000 mm		1810 mm		
Blackout fibre glass fabric	Max. overall width	6000	) mm	6000 mm		
Satiné 21154	Max. section width	4000	) mm	5000	) mm	
Blackout polyester fabric Soltis Opaque B92	Max. height	2700 mm		4000 mm		
	Max. total surface area	16.2	! m²	16	m²	
Coupled screen with 2 motors						
Possible dimensions per section, per fabric	Max. overall width	6000	) mm	6000	) mm	
type according to 'single screen' table	Max. total surface area	24	m²	36	m²	

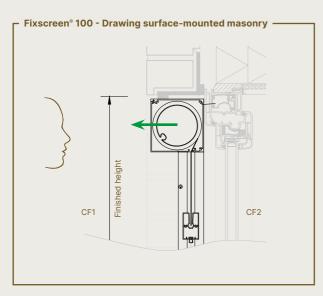
# NOTE

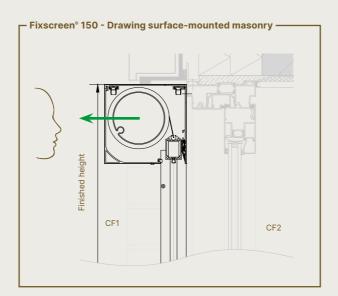
- Fixscreen 150: It is recommended that at least two people install the product. Weight:  $\pm$  23 kg/rm.

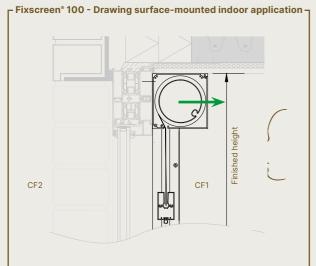
### Motors:

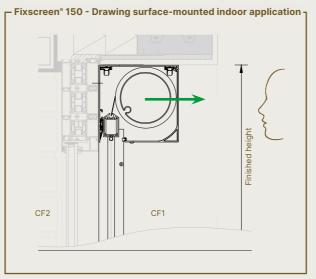
- \*For Somfy Maestria IO the restrictions below apply: Fixscreen 100: Square: width ≥ 1200 mm height ≤ 2700 mm / Softline: width ≥ 1800 mm height ≤ 2700 mm
- Detecto Renson motor Safety First and Somfy Maestria IO: always coupled with 2 motors



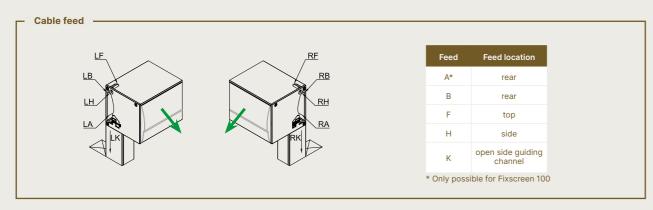


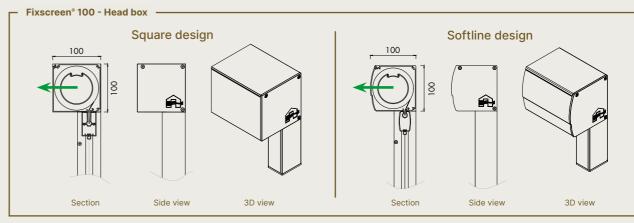


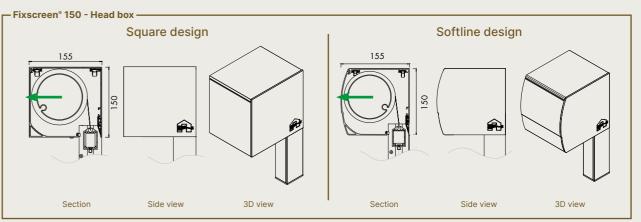


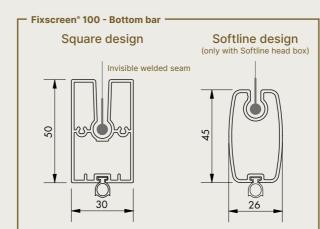


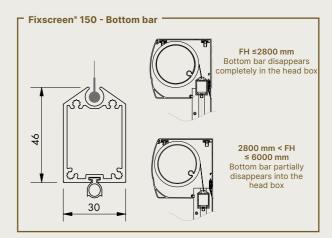


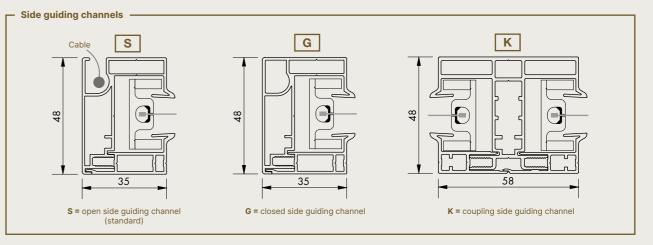












# **FIXSCREEN®**

# Surface-mounted with mounting feet IM 1+











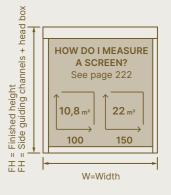


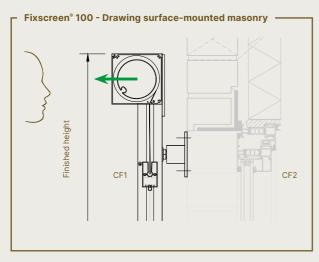
Design	Fixscreen® 100	Fixscreen® 150
Head box size (HxD)	100 mm x 100 mm	150 mm x 155 mm
Head box extension	500	mm
Square	~	/
Softline	~	/
Retractable bottom bar	-	√ (to FH ≤2800 mm)
Recessed fabric tube	·	/
Base plate side guiding channel	At an an	gle of 0°
Wind resistance		
Wind classification EN13561:2004	3	3
Wind tunnel test report	N°114-31926	N°113-25809
Guaranteed wind resistance	Up to 80 km/h in	closed position
Control		
Detecto Renson motor Safety First	~	/
Somfy mechanic motor	·	/
Somfy IO radio-controlled motor	~	/
Certificates		
Declaration of Performance (DoP)	DOP-2015	SC00002
Durability test report	WTCB N°651 X	E823 CAR4139

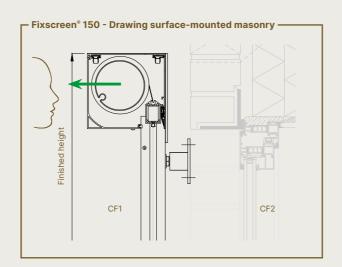
Dimensions Single screen		Fixcree	en° 100	Fixscreen® 150
Fibre glass fabric Sergé / Natté Polyester fabric Soltis Veozip / Soltis Horizon 86 / Soltis Perform 92	Min. width Max. width Max. height Max. surface area	795 4000 mm 2700 mm 10.8 m <sup>2</sup>	3000 mm 3500 mm 10.5 m <sup>2</sup>	905 mm 6000 mm 6000 mm 22 m <sup>2</sup>
Linkable Required intermediate dimension (expansion)		5	5 mm	

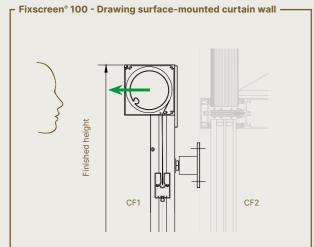
### OTE

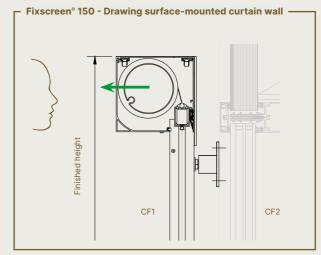
- Fixscreen 150: It is recommended that at least two people install the product. Weight: ± 23 kg/rm.

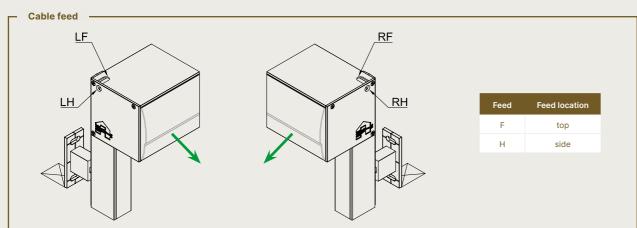


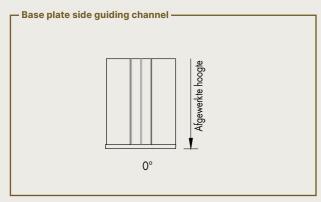




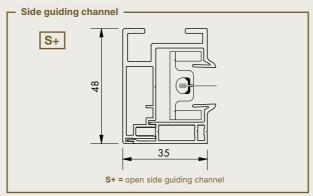


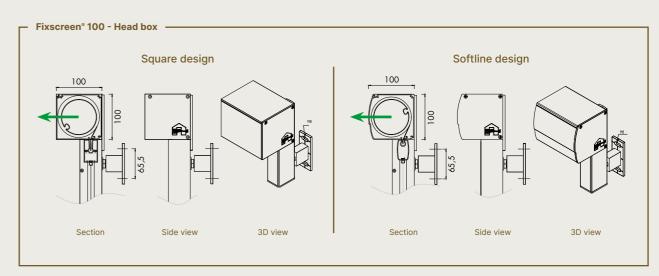


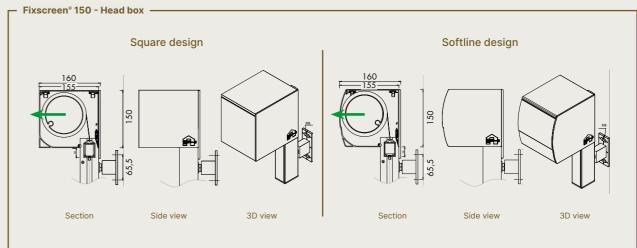


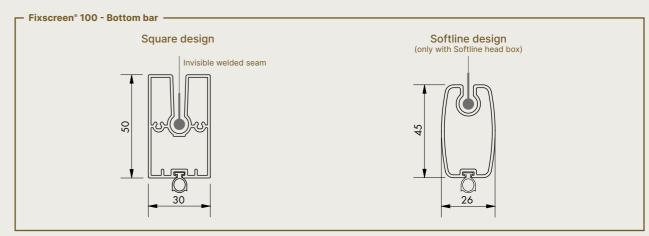


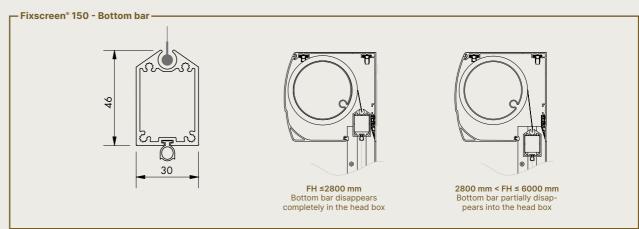


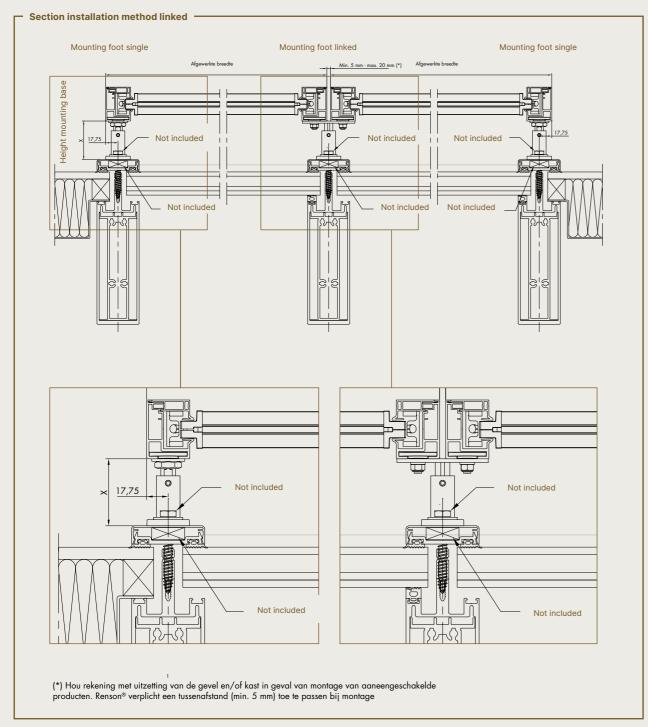


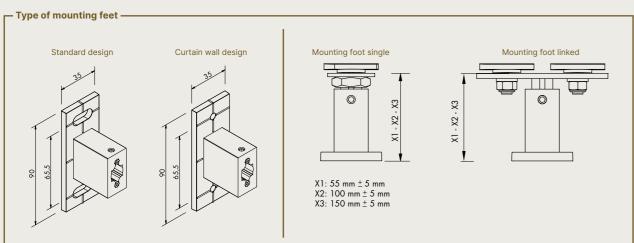












Determination of number of bases depends on width and height (W x H)*  Single or linked product					
(in mm)	number of 'mounting feet single' per side guiding channel		+	number of 'mounting feet linked' per link	
	bases l	eft / right		bases	middle
type 55 mm					
Width ≤	4000	6000		4000	6000
Height ≤					
2000	2	2		2	2
4000	2	2		2	3
5200	3	3		3	3
6000	4	4		4	4
type 100 mm					
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 150 mm					
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

<sup>\*</sup> Verify possible dimensions on page 31

# FIXSCREEN® SOLAR

# Surface-mounted IM 1





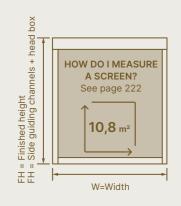


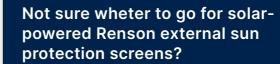




Design	Fixscreen® 100 Solar
Head box size (HxD)	128 mm x 100 mm
Head box extension	-
Square	<b>✓</b>
Softline	-
Bottom bar partially retractable	✓
Recessed fabric tube	✓
Base plate side guiding channel	At an angle of 0° or 5°
Wind resistance	
Wind classification EN13561:2004	3
Wind tunnel test report	N°113-25809
Guaranteed wind resistance	Up to 130 km/h in closed position
Control	
Somfy radio-controlled motor	·
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Durability test report	WTCB N°651 XE823 CAR4139

Dimensions				
Single screen				
Fibre glass fabric Sergé / Natté / Privacy	ore glass fabric Sergé / Natté / Privacy Min. width 650 mm			
Polyester fabric Soltis Veozip / Soltis Horizon 86 / Soltis Perform 92 Tuffscreen insect mesh	Max. width	4000 mm	3000 mm	
	Max. height	2700 mm	3500 mm	
	Max. surface area	10.8 m <sup>2</sup>	10.5 m <sup>2</sup>	
Blackout fibre glass fabric	Min. width	1000	mm	
Satiné 21154	Max. width	2000	) mm	
Blackout polyester fabric		) mm		
Soltis Opaque B92	Max. surface area	5.4	m²	

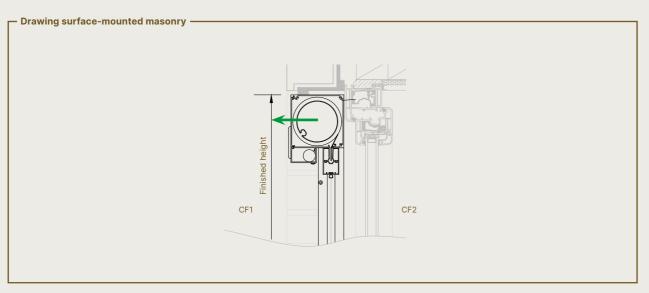


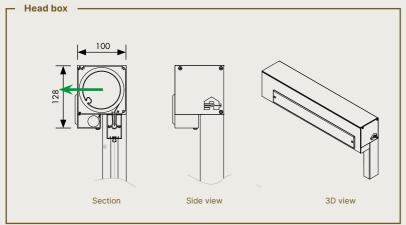


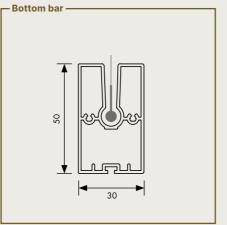


The Somfy Solar app allows you to determine in advance, and in a specific environment, the capabilities of a Solar solution. Available for free in the App store and via Google Play.

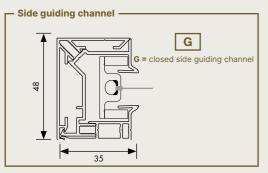


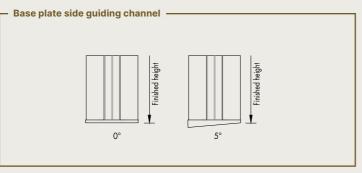












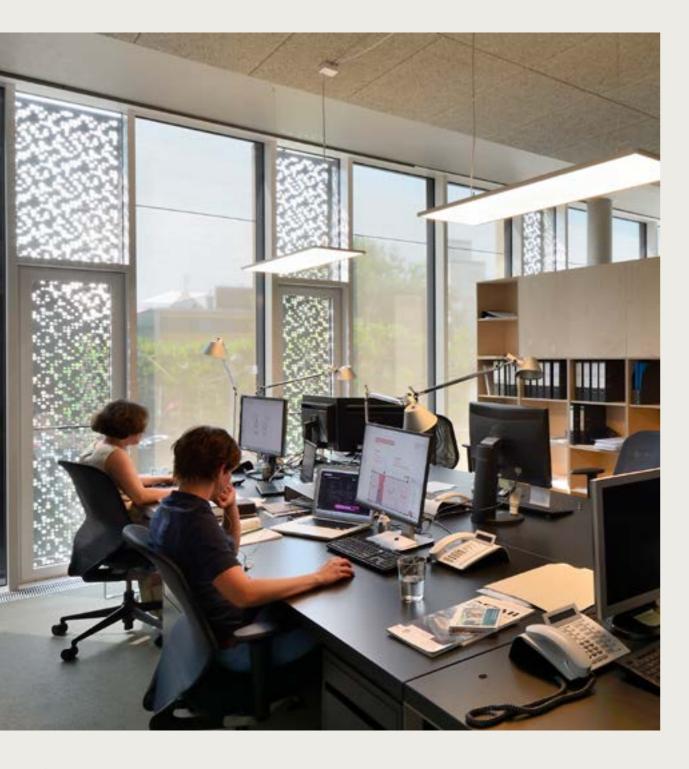


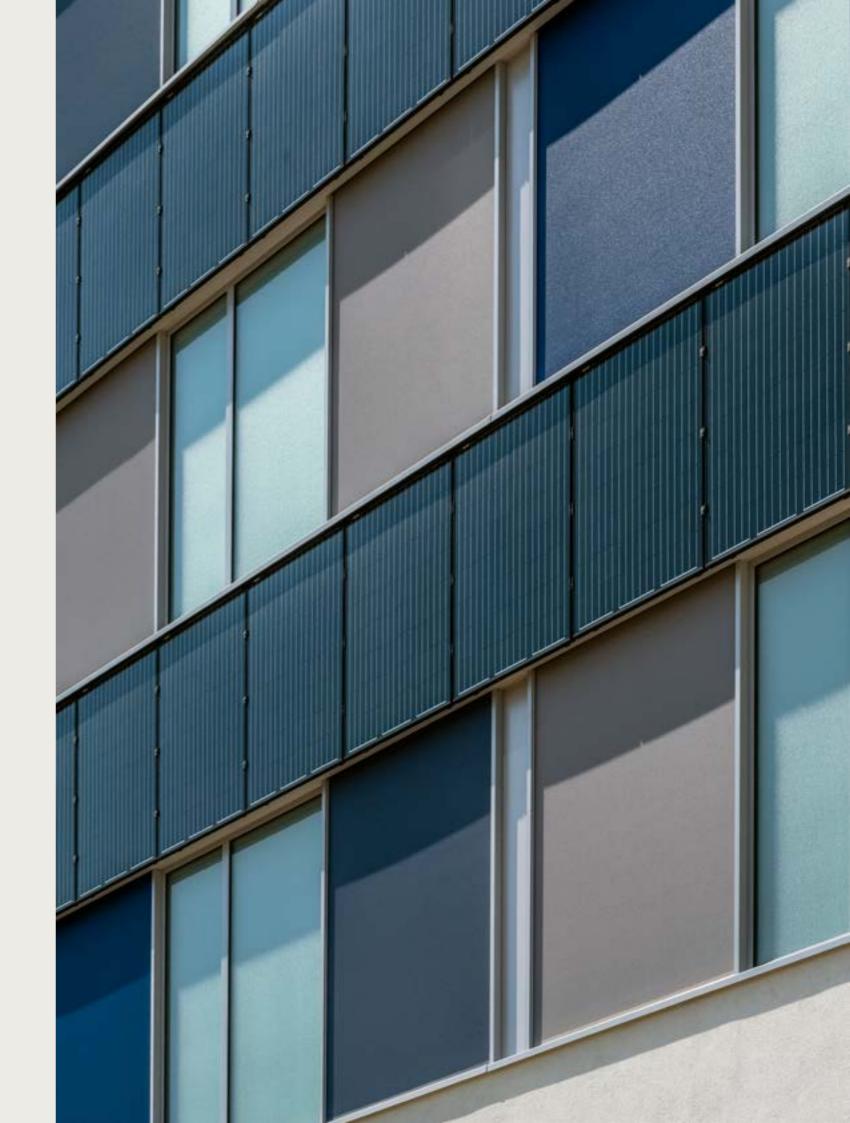






# FIXSCREEN® RECESSED IN FRONT OF THE WINDOW





# **FIXSCREEN®**

## Recessed in front of the window IM 7

Installation method **7A** fabric close to the window Installation method **7B** fabric away from the window Combines perfectly with screen, door handle...













Design	Fixscreen® 100 Slim	Fixscreen® 150			
Head box dimensions (HxD)	150 mm x 110 mm	150 mm x 155 mm			
Head box extension	500 mm				
Square		<b>✓</b>			
Softline		-			
Retractable bottom bar	<b>✓</b>	√ (to FH ≤2800 mm)			
Recessed fabric tube		<b>~</b>			
Base plate side guiding channel	At an angle	e of 0° or 5°			
Wind resistance					
Wind classification EN13561:2004		3			
Wind tunnel test report	N°113	-25809			
Guaranteed wind resistance	Up to 130 km/h in closed posi	ition depending on dimensions			
Control					
Detecto Renson motor Safety First		<b>~</b>			
Somfy mechanic motor	,	<b>~</b>			
Somfy (Meastria*) IO radio-controlled motor	<b>✓</b>				
Certificates					
Declaration of Performance (DoP)	DOP-2015SC00002				
Durability test report	WTCB N°651 X	(E823 CAR4139			

Dimensions		Fixscreen	° 100 Slim	Fixscre	en® 150	
Single screen						
Fibre glass fabric	Min. width	700	700 mm		909 mm	
Sergé / Natté	Max. width	6000 mm 4000 mm		6000	6000 mm	
Soltis Veozip polyester fabric	Max. height	2800 mm	4000 mm	6000	) mm	
Tuffscreen insect mesh	Max. surface area	16.8 m²	16 m²	22	m²	
	Min. width	700	mm	909	mm	
Privacy fibre glass fabric	Min. height	300	mm	300	mm	
Polyester fabric Soltis Horizon 86	Max. width	4500 mm	3000 mm	6000	) mm	
/ Soltis Perform 92	Max. height	2800 mm	3500 mm	6000	) mm	
	Max. surface area	12.6 m <sup>2</sup>	10.5 m <sup>2</sup>	22	m²	
	Min. width 1000 mm		1000 mm			
Blackout fibre glass fabric	Min. height	300 mm		300 mm		
Satiné 21154 Blackout polyester fabric	Max. width	4000 mm		4000 mm	6000 mm	
Soltis Opaque B92	Max. height	2800 mm		4000 mm	2,600 mm	
	Max. surface area	11.2 m <sup>2</sup>		16 m²	15.6 m <sup>2</sup>	
Coupled screen with 1 motor (IM 7A)						
	Min. section width	800	mm	1818 mm		
Fibre glass fabric Sergé / Natté	Max. overall width	6000	) mm	6000 mm		
Tuffscreen insect mesh	Max. section width	5000 mm		5000 mm		
Soltis Veozip polyester fabric	Max. height	2800	) mm	6000 mm		
	Max. total surface area	16.8	3 m²	22	m²	
	Min. section width	1000	) mm	1818 mm		
Blackout fibre glass fabric Satiné 21154	Max. overall width	6000	) mm	6000 mm		
Blackout polyester fabric	Max. section width	4000	) mm	5000 mm		
Soltis Opaque B92	Max. height	2800	) mm	2,60	0 mm	
	Max. total surface area	16.8	3 m²	15.6	S m²	
Coupled screen with 2 motors (IM 7A	)					
Possible dimensions per section,	Max. Total width	6000	) mm	6000	) mm	
per fabric type according to 'single screen' table	Max. Total surface area	24	m²	36 m²		

### NOTE

- Head box extension not possible with side guiding channel D
- Plaster profile and fixation bracket optional.

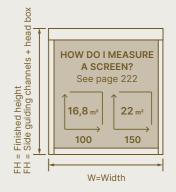
### Motors:

- \*For Somfy Maestria IO the restrictions below apply: Fixscreen 100 Slim: width ≥ 1600 mm - height ≤ 2800 mm
- Detecto Renson motor Safety First and Somfy Maestria IO: always coupled with 2 motors

### IM 7B:

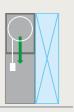
Note that the system must be accessible across the full width from the inside...

- in case of a motor fault while the screen is down. Otherwise the fabric needs to be  $\operatorname{cut}\nolimits$
- for adjusting the end points in the case of a mechanical motor

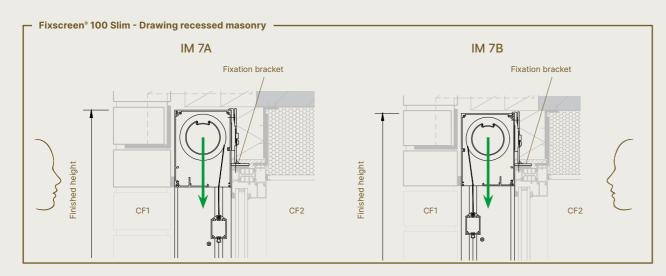


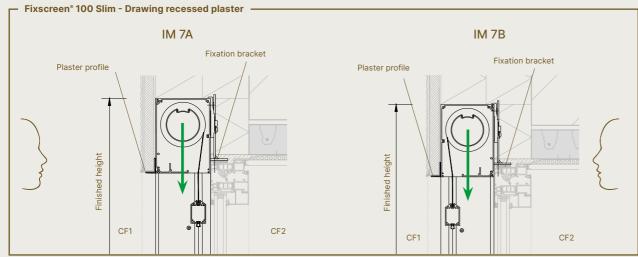
TIP: If a door handle, sliding door handle or fly screen could possibly prevent the free running of the fabric, choose installation method 7B. This ensures the fabric runs away from the window and free running is assured. Note that the system must be accessible across the full width from the inside.

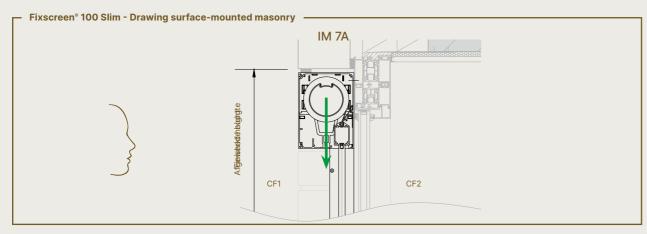


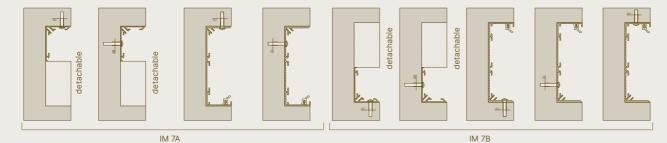


RENSON®

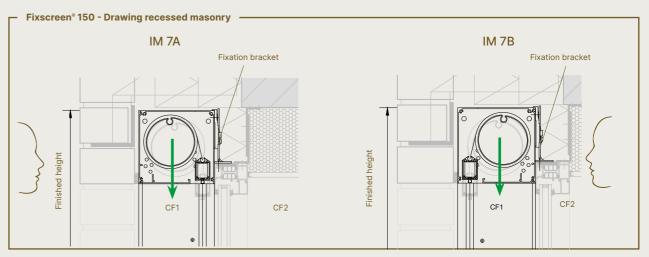


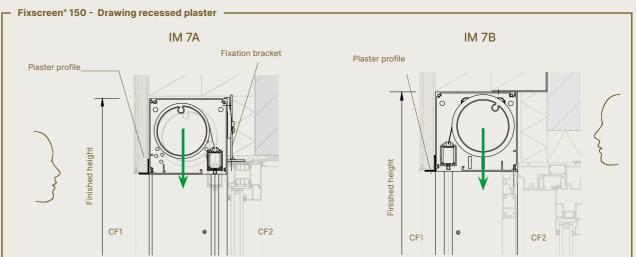


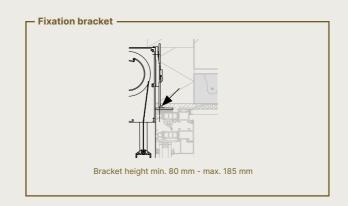


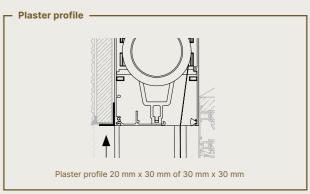


Note: When choosing the narrow side guiding channel G, the customer must foresee something detachable under the head box in order to be able to disassemble the fabric set underneath (H = min. 680 mm).









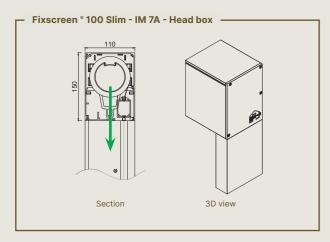
# **Fixation bracket for rapid mounting**

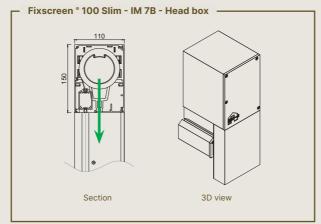
The fixation brackets offer a simple solution for rapid mounting to the window frame. The ingenious one-fits-all design of the fixation bracket ensures all screen types can be secured using the same accessory. More info on www.renson.eu/fixation-brackets

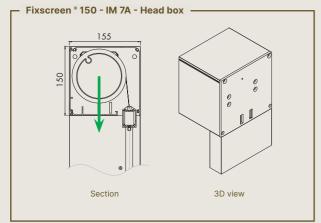


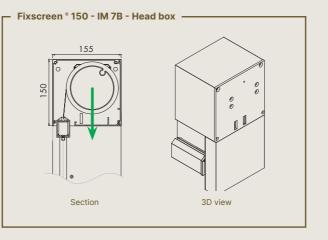
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed

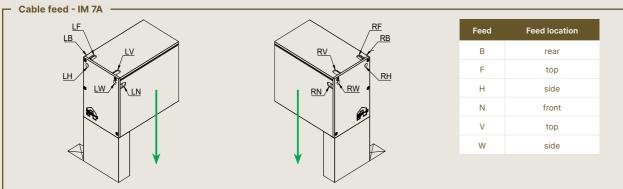


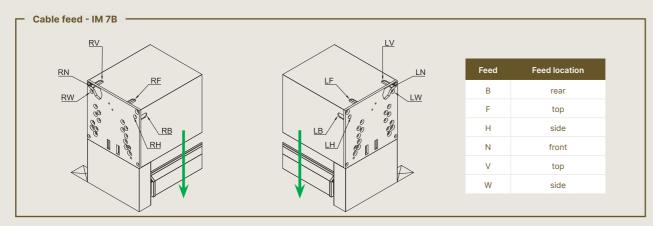


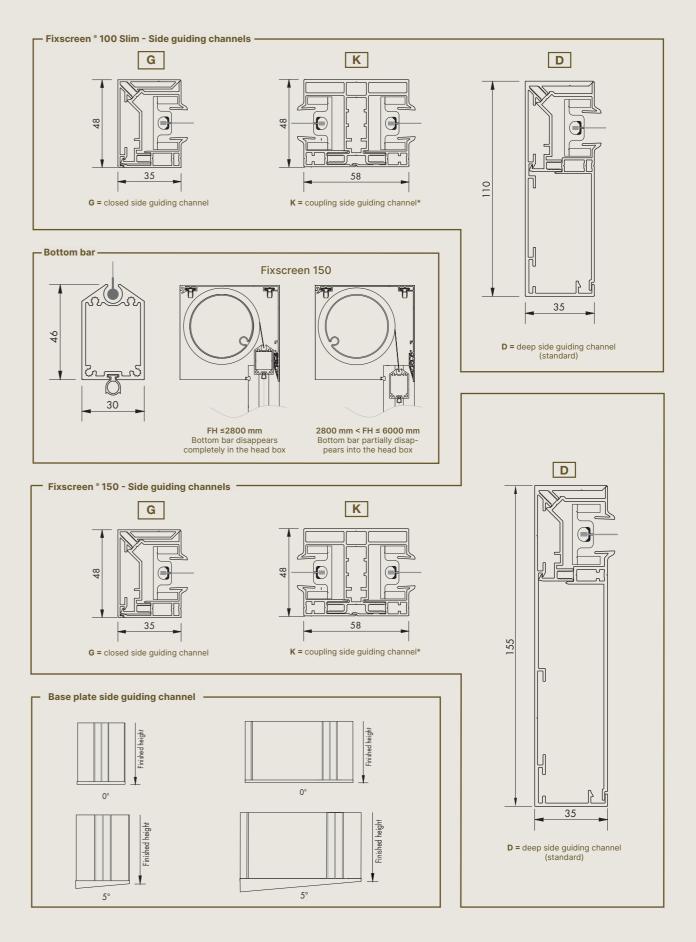










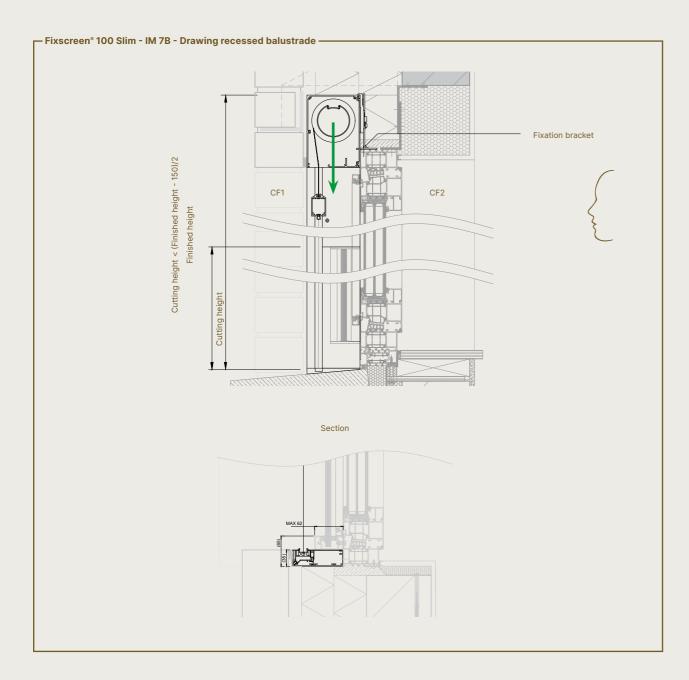


Viewing direction determines choice of left or right cable feed 

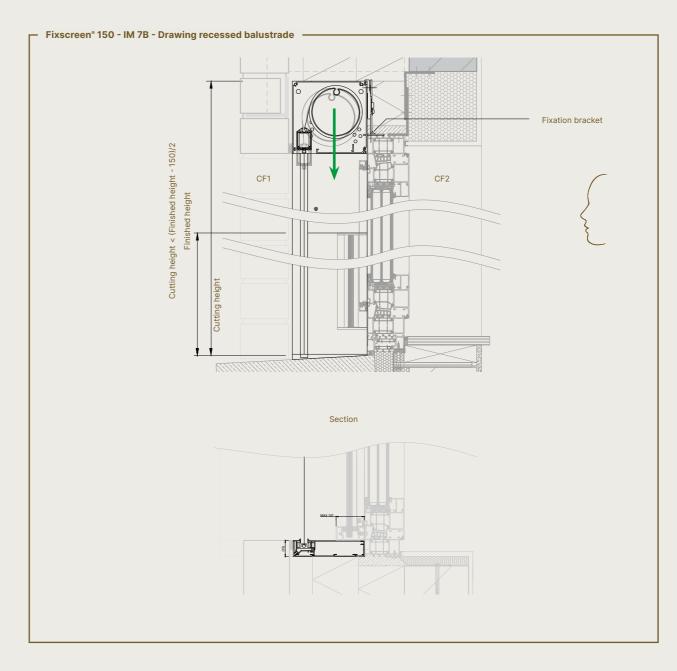
direction in which fabric set should be removed

\*Only possible with IM 7A

RENSON"



With Fixscreen 100 Slim IM 7B and Fixscreen 150 IM 7B, a cut can optionally be made in the deep side guiding channel if a balustrade is installed, so that the middle profile and front profile can easily be removed for service after installation.



Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed

# FIXSCREEN® RECESSED ON TOP OF THE WINDOW





# **FIXSCREEN®**

# Recessed on top of the window IM 4









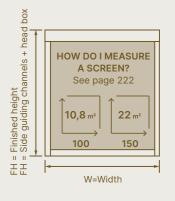


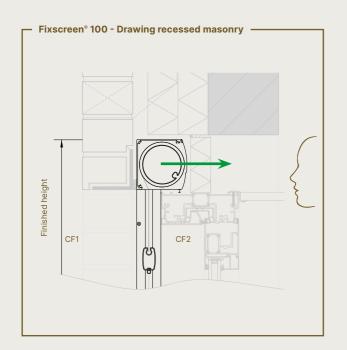


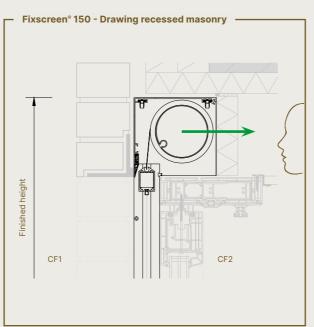
Design	Fixscreen® 100	Fixscreen® 150		
Head box dimensions (HxD)	100 mm x 100 mm	150 mm x 155 mm		
Head box extension		-		
Square	-	~		
Softline	~	-		
Retractable bottom bar	~	√ (to FH ≤800 mm)		
Recessed fabric tube		/		
Base plate side guiding channel	At an angle	e of 0° or 5°		
Wind resistance				
Wind classification EN13561:2004	:	3		
Wind tunnel test report	N°113-	-25809		
Guaranteed wind resistance	Up to 130 km/h in closed posi	tion depending on dimensions		
Control				
Detecto Renson motor Safety First		-		
Somfy mechanic motor		/		
Somfy IO radio-controlled motor	~			
Certificates				
Declaration of Performance (DoP)	DOP-2015SC00002			
Durability test report	WTCB N°651 XE823 CAR4139			

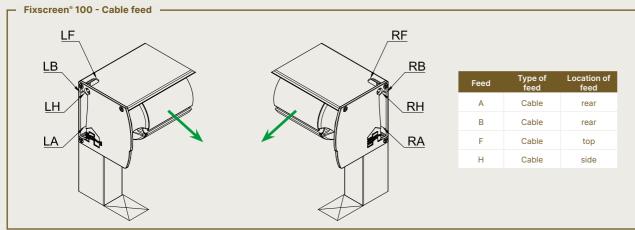
Dimensions		Fixscre	enº 100	Fixscre	en® 150
Single screen					
Fibre glass fabric Sergé / Natté / Privacy	Min. width	700	mm	905	mm
Polyester fabric Soltis Veozip /	Max. width	4000 mm	3000 mm	6000	) mm
Soltis Horizon 86 / Soltis Perform 92	Max. height	2700 mm	3500 mm	6000	) mm
Tuffscreen insect mesh	Max. surface area	10.8 m <sup>2</sup>	10.5 m <sup>2</sup>	22	m²
Blackout fibre glass fabric	Min. width	1000	) mm	1000	) mm
Satiné 21154	Max. width	2000	) mm	4000 mm	6000 mm
Blackout polyester fabric	Max. height	2700	) mm	4000 mm	2,600 mm
Soltis Opaque B92	Max. surface area	5.4 m <sup>2</sup>		16 m²	15.6 m <sup>2</sup>
Coupled screen with 1 motor					
Fibre glass fabric Sergé / Natté	Min. section width	795 mm		1810	) mm
Soltis Veozip / Soltis Horizon 86 / Soltis	Max. section width	4000 mm		5000	) mm
Perform 92 polyester fabric	Max. height	2700	) mm	6000	) mm
Tuffscreen insect mesh	Max. total surface area	16.2 m <sup>2</sup>		22 m²	
Blackout fibre glass fabric	Min. section width	795	mm	1810	) mm
Satiné 21154	Max. section width	2000	) mm	4000	) mm
Soltis Opaque B92 blackout polyester	Max. height	2700	) mm	2,60	0 mm
fabric	Max. total surface area	10.8	3 m²	15.6	3 m²
Coupled screen with 2 motors (IM 7A)					
Descible dimensions not costice	Max. Total width	6000	) mm	6000	) mm
Possible dimensions per section, per fabric type according to 'single screen' table	Max. Total surface area	21	m²	36	m²

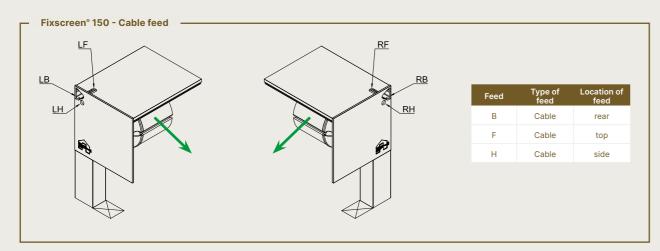
- The inner side is finished by the carpenter and must be detachable.
- Fixscreen 100: Finished height = window height + 5 mm + head box height
   Fixscreen 150: installation with minimum 2 people recommended. Weight: ± 23 kg/rm.

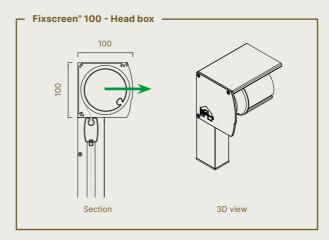


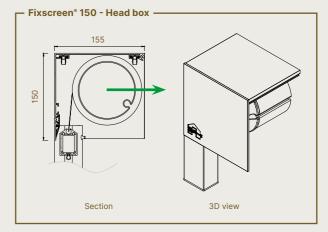




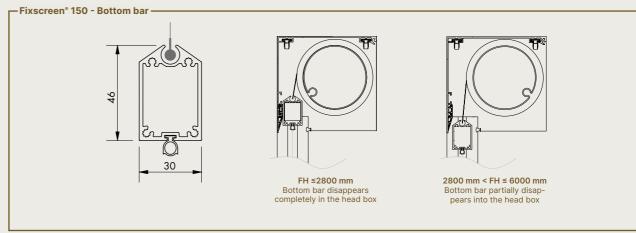


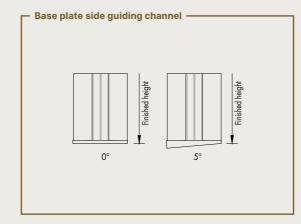


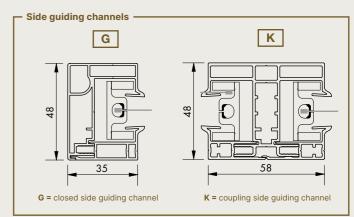












Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed 

# FIXSCREEN® RECESSED

ON TOP OF THE WINDOW WITH ACOUSTICS OR VENTILATION





# FIXSCREEN® MONO AK

# Recessed on top of the window with acoustics IM 4











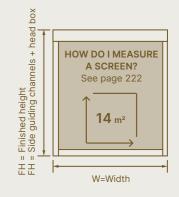




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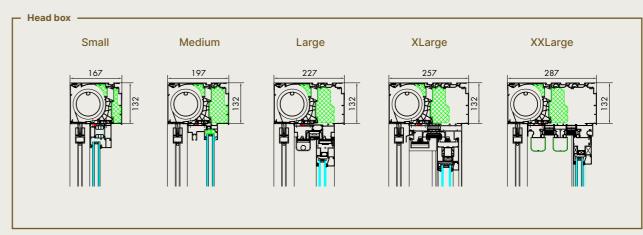
Design	Small	Medium	Large	X-Large	XX-Large
Head box size (HxD) (mm)	132 × 167	132 × 197	132 × 227	132 × 257	132 × 287
Compatible window thicknesses	50-94 mm	95-124 mm	125-154 mm	155-184 mm	185-215 mm
Wind resistance					
Wind classification EN13561:2004			3		
Wind tunnel test report			N°113-25809		
Guaranteed wind resistance	Up to 1	130 km/h in clos	ed position dep	ending on dime	ensions
Control					
Detecto Renson motor Safety First	~				
Somfy mechanic motor			~		
Somfy IO radio-controlled motor			~		
Comfort					
Acoustic damping Dnew (C;Ctr) (rolled up fabric)	47(-1;4)dB	50(-1;-3)dB	50(-1;-3)dB	50(-1;-3)dB	52(-2;-5)dB
Technical details					
With thermal break			~		
U value (W/m2K)	0.92	0.53	0.54	0.54	0.55
Insect-proof	✓				
Certificates					
Declaration of Performance (DoP)		DO	OP-2015SC000	02	
Durability test report	WTCB N°651 XE823 CAR4139				

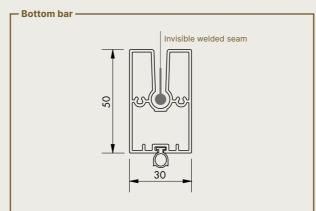
Dimensions		
Single screen		
Fibre glass fabric Sergé / Natté / Privacy	Min. width	700 mm
Soltis Horizon 86 / Soltis Perform 92 polyester fabric Tuffscreen insect mesh	Max. width	4000 mm
	Max. height	3500 mm
	Max. surface area	14 m²
Blackout fibre glass fabric	Min. width	1000 mm
Satiné 21154	Max. width	2000 mm
Blackout polyester fabric	Max. height	2700 mm
Soltis Opaque B92	Max. surface area	5.4 m <sup>2</sup>

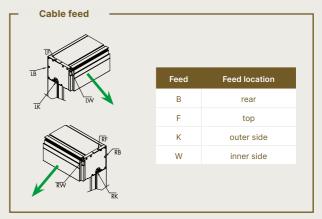




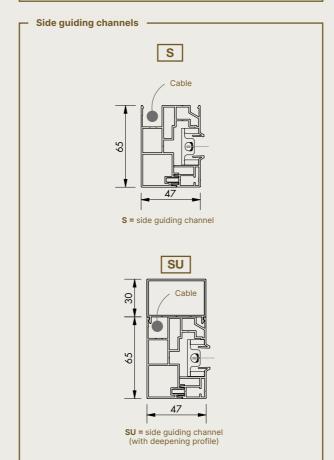




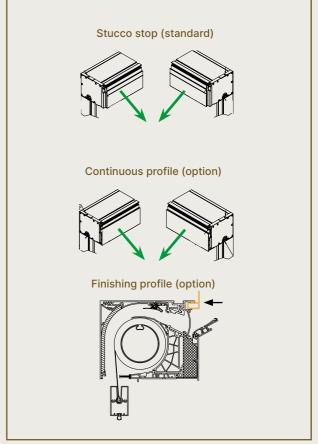




Optional finishing profile —









# FIXVENT® MONO AK

Recessed on top of the window with acoustics or ventilation IM 4













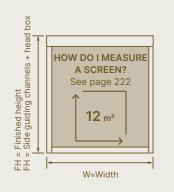


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Design	Small	Medium	Large	X-Large	XX-Large	
Head box size (HxD) (mm)	132 × 167	132 × 197	132 × 227	132 × 257	132 × 287	
Compatible window thicknesses	50-94 mm	95-124 mm	125-154 mm	155-184 mm	185-215 mn	
Wind resistance						
Wind classification EN13561:2004			3			
Wind tunnel test report		N°113-25809				
Guaranteed wind resistance	Up to	130 km/h in clos	sed position dep	pending on dime	ensions	
Control						
Detecto Renson motor Safety First		<b>✓</b>				
Somfy mechanic motor		<b>✓</b>				
Somfy IO radio-controlled motor		✓				
Certificates						
Declaration of Performance (DoP)		DOP-2015SC00002				
Durability test report		WTCB N°651 XE823 CAR4139				

Dimensions		
Single screen		
Fibre glass fabric Sergé / Natté / Privacy	Min. width	700 mm
Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Max. width	4000 mm
	Max. height	3000 mm
Tuffscreen insect mesh	Max. surface area	12 m²
Blackout fibre glass fabric	Min. width	1000 mm
Satiné 21154	Max. width	2000 mm
Blackout polyester fabric Soltis Opaque B92	Max. height	2700 mm
	Max. surface area	5.4 m <sup>2</sup>

- Small head box not available for the Fixvent Mono ULTRA/EXTREME.

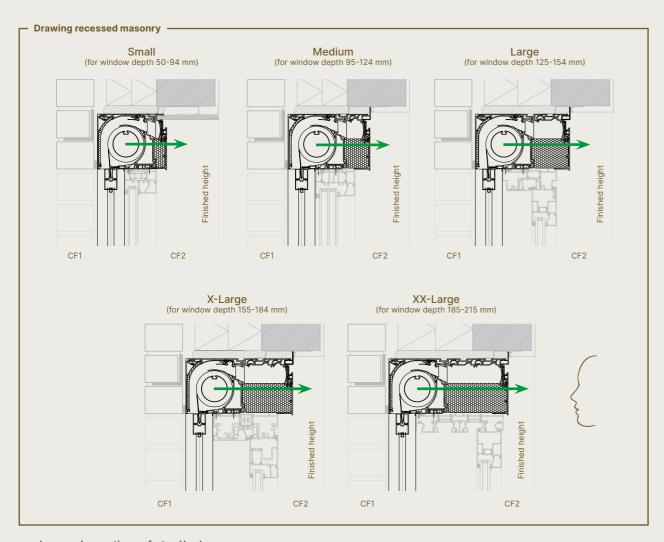


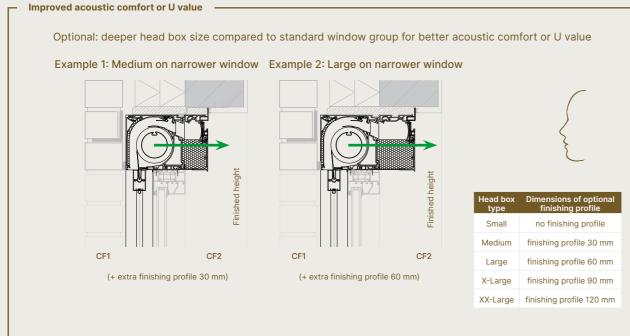
Ventilation		
Airflow		
	Fixvent <sup>®</sup> Mono AK	18324 mm²/m
Equivalent Area	Fixvent® Mono AK ULTRA	4836 mm²/m
7	Fixvent® Mono AK EXTREME	2800 mm²/m
	Fixvent® Mono AK	12,8 l/s/m
Q at 1 Pa	Fixvent® Mono AK ULTRA	3,7 l/s/m
	Fixvent® Mono AK EXTREME	2,1 l/s/m

Collioit	Jiliali	Mediaiii	Large	A Large	AA Laige
Acoustic insulation $D_{new}(C;C_{tr})$ in open position	on (rolled up fab	ric)			
Fixvent® Mono AK	33(0;-2)dB	35(0;-3)dB	36(-1;-4)dB	37(-1;-4)dB	40(-1;-4)dB
Fixvent® Mono AK Ultra	n/a	38(0;-2)dB	40(-1;-4)dB	43(-1;-4)dB	45(-1;-5)dB
Fixvent® Mono AK Extreme	n/a	43(0;-3)dB	43(0;-3)dB	46(-1;-4)dB	48(-2;-5)dB

Technical details							
Self-regulating		at 2 Pa					
With thermal break		✓					
U value (W/m²K)							
Fixvent® Mono AK	1.47	0.98	0.80	0.77	0.72		
Fixvent® Mono AK Ultra	n/a	0.70	0.55	0.46	0.41		
Fixvent® Mono AK Extreme	n/a	0.62	0.47	0.38	0.32		
Leakage flow in closed position	< 15% at 50 Pa						
Insect-proof		~					

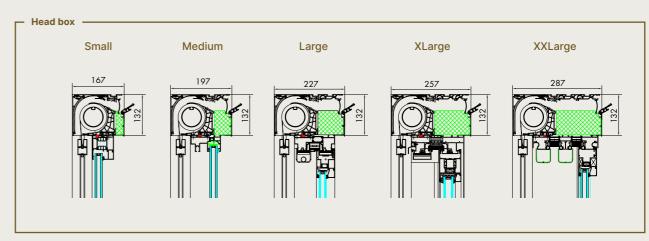


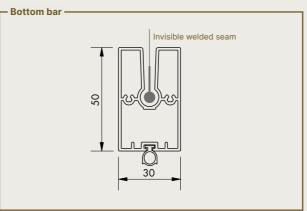


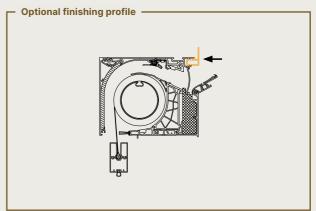


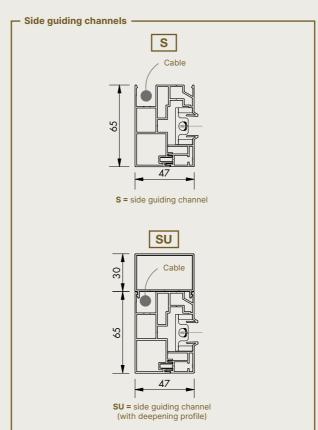
 $\textbf{Note:} \ \mathsf{The} \ \mathsf{Fixvent} \ \mathsf{Mono} \ \mathsf{AK} \ \mathsf{Ultra/Extreme} \ \mathsf{is} \ \mathsf{always} \ \mathsf{supplied} \ \mathsf{with} \ \mathsf{finishing} \ \mathsf{profile} \ \mathsf{as} \ \mathsf{standard}.$ 

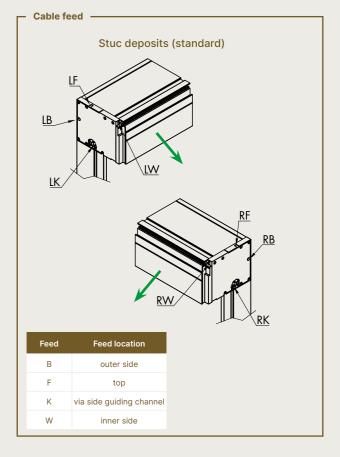
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed











Note:
- The Fixvent Mono AK ULTRA/EXTREME is always supplied with finishing profile as standard.
- Small head box not applicable for the Fixvent ULTRA/EXTREME.



Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed

# **FIXVENT® MONO UT**

# Recessed on the window with acoustics or ventilation IM 4













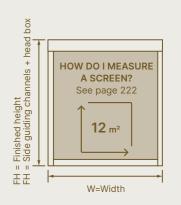




Design	Small	Medium	Large	X-Large	XX-Large	
Head box size (HxD) (mm)	132 × 167	132 × 197	132 × 227	132 × 257	132 × 287	
Compatible window thicknesses	50-94 mm	95-124 mm	125-154 mm	155-184 mm	185-215 mm	
Wind resistance						
Wind classification EN13561:2004			3			
Wind tunnel test report		N°113-25809				
Guaranteed wind resistance	Up to	130 km/h in clos	sed position dep	pending on dime	ensions	
Control						
Detecto Renson motor Safety First		✓				
Somfy mechanic motor		<b>✓</b>				
Somfy IO radio-controlled motor*		<b>~</b>				
Certificates						
Declaration of Performance (DoP)		DOP-2015SC00002				
Durability test report		WTCB N°651 XE823 CAR4139				

Dimensions		
Single screen		
Fibre glass fabric Sergé / Natté / Privacy	Min. width	700 mm
Soltis Horizon 86 / Soltis Perform 92 polyester fabric	Max. width	4000 mm
	Max. height	3000 mm
Tuffscreen insect mesh	Max. surface area	12 m²
Blackout fibre glass fabric Satiné 21154 Blackout polyester fabric	Min. width	1000 mm
	Max. width	2000 mm
	Max. height	2700 mm
Soltis Opaque B92	Max. surface area	5.4 m²

- Small head box not available for the Fixvent Mono UT/ULTRA.



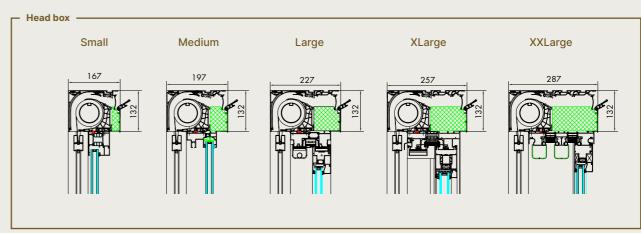
Ventilation							
Airflow							
Equivalent Area	Fixvent® Mono UT	19724 mm²/m					
	Fixvent® Mono UT ULTRA	4836 mm²/m					
Q at 1 Pa	Fixvent® Mono UT	15.5 l/s/m					
	Fixvent® Mono UT ULTRA	3.7 l/s/m					
Comfort		Small	Medium	Large	X-Large	XX-Large	
Acoustic insulation D <sub>new</sub> (C;C <sub>tr</sub> ) in open position (rolled up fabric)							
Fixvent® Mono UT		33(0;-2)dB	35(0;-3)dB	36(-1;-4)dB	37(-1;-4)dB	40(-1;-4)dB	
Fixvent <sup>o</sup> Mono UT Ultra		n/a	38(0;-2)dB	40(-1;-4)dB	43(-1;-4)dB	45(-1;-5)dB	
Technical details							
Self-regulating		at 10 Pa					
With thermal break		✓					
U value (W/m	n²K)						
Fixvent <sup>®</sup> Mono UT Ultra		1.47	0.98	0.80	0.77	0.72	
Fixvent <sup>®</sup> Mono UT Ultra		n/a	0.70	0.55	0.46	0.41	
Leakage flow in closed position			< 15% at 50 Pa				
Insect-proof			✓				

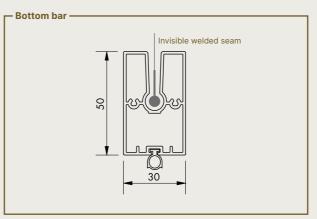


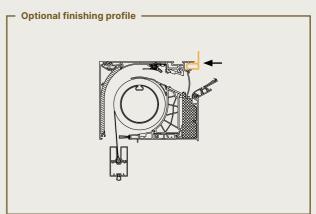


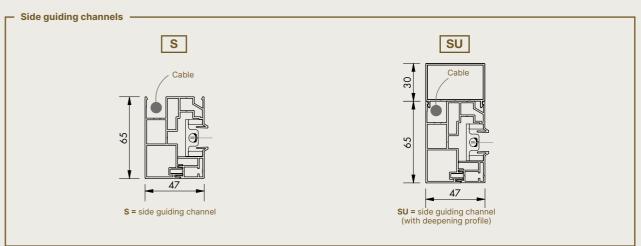
Note: The Fixvent Mono UT Ultra is always supplied with finishing profile as standard.

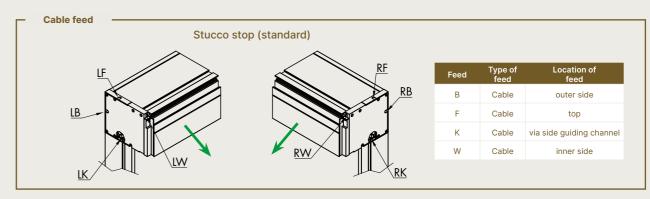
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed











- The Fixvent Mono UT ULTRA is always supplied with finishing profile as standard.
   Small head box not applicable for the UT ULTRA version

Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed 

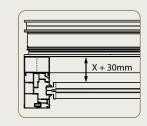


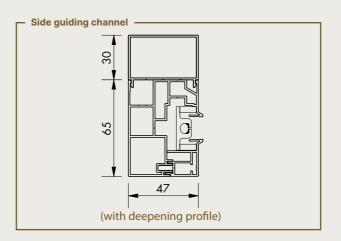




# Option side guiding channel with deepening profile

The optional side guiding channel with deepening profile allows you to create extra space between window and fabric (e.g. to install a fixed or sliding mosquito net). The deepening profile is available in a fixed size - 30 mm x 47 mm - and therefore ensures that the space between the bottom bar and the window increases by 30 mm. When choosing this option, make sure that the head box size is still sufficient. Depending on the window depth, a larger head box may be required.





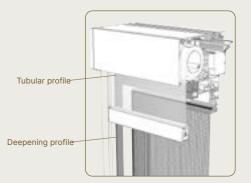
# **Option tubular profile**

When selecting side guiding channels with deepening profile, horizontal support at the bottom of the Fixvent Mono AK/UT and Fixscreen Mono AK head box is required. This can be done using the optional tubular profile. The head box must be screwed to the tubular profile (or other horizontal support) to safeguard correct operation and the warranty. The optional tubular profile is available in two different versions (H x D): 15 mm x 30 mm or 30 mm x 30 mm.

# What does this mean specifically?

Single screen

- Side guiding channel with deepening profile (SU) x2 pieces according to finished height (FH) head box height
- Tubular profile x1 piece according to finished width 94 mm



## FIXSCREEN® FREESTANDING





## **FIXSCREEN®**

## Freestanding IM 1F











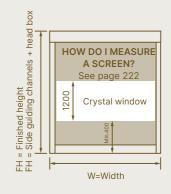


Design	
Head box dimensions (HxD)	150 mm x 155 mm
head box extension	500 mm
Square	✓
Softline	✓
Retractable bottom bar	✓ (to FH ≤2800 mm)
Recessed fabric tube	✓
Base plate side guiding channel	At an angle of 0° or 5°
Wind resistance	
Wind classification EN13561:2004	3
Wind tunnel test report	N°113-25809
Guaranteed wind resistance	Up to 60 km/h in closed position
Control	
Detecto Renson motor Safety First	<b>~</b>
Somfy mechanic motor	✓
Somfy (Meastria*) IO radio-controlled motor	<b>~</b>
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Durability test report	WTCB N°651 XE823 CAR4139

Dimensions		
Single screen		
	Min. width	905 mm
Fibre glass fabric Sergé / Natté / Privacy	Max. width	6000 mm
Tuffscreen insect mesh	Max. height	3000 mm
	Max. surface area	18 m²

#### NOTE

- A wind sensor must be used for a finished height > 2800 mm.
- \*For Somfy Maestria IO, the restriction applies: width ≥ 1200 mm
- It is recommended that at least two people install the product. Weight: ± 23 kg/rm.

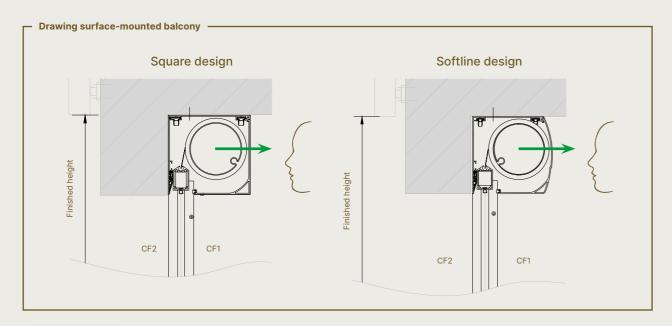


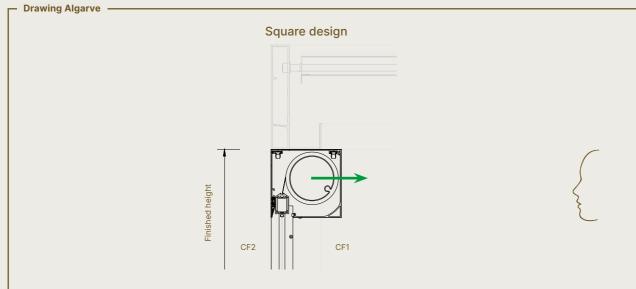
## Option crystal window in the full width

A crystal fabric can be chosen to maintain optimal contact with the outdoors. This is a transparent fabric that is integrated into a Fixscreen fibre glass fabric in a freestanding application. The crystal window in the full width of the screen is 1200 mm high. There must be a distance of 400 mm between the crystal window in the full width and the bottom.

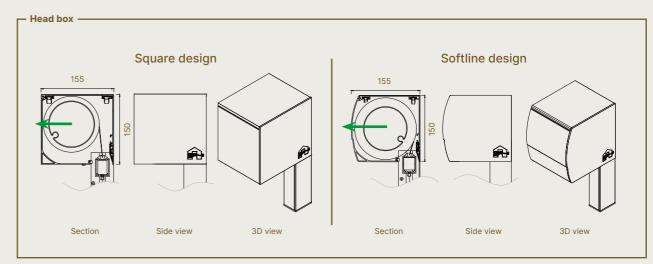


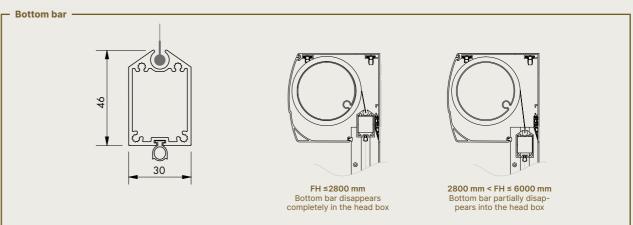


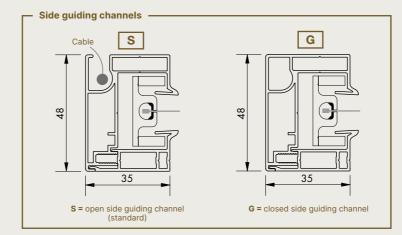


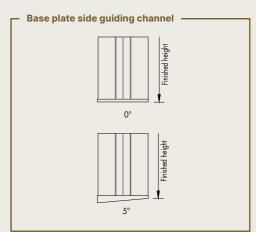


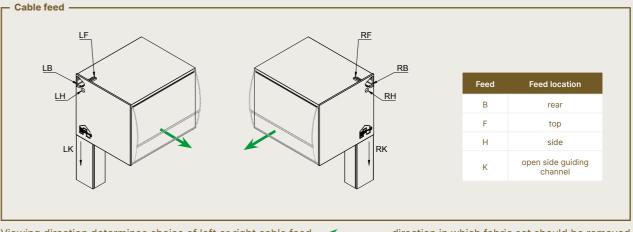
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed







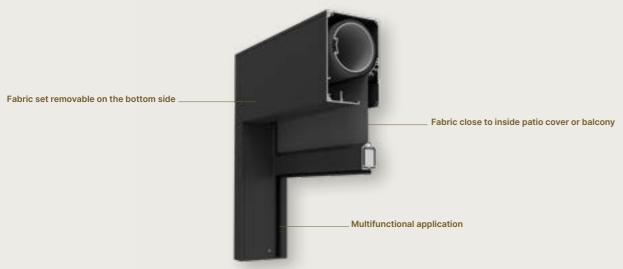




## **FIXSCREEN®**

## Freestanding IM 7F











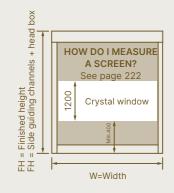


Design	Fixscreen® 100 Slim	Fixscreen® 150	
Head box dimensions (HxD)	150 mm x 110 mm	150 mm x 155 mm	
head box extension	500 mm		
Fabric tube with click-profile	~		
Square	~		
Softline	-		
Retractable bottom bar	~	√ (to FH ≤2800 mm)	
Recessed fabric tube	~		
Base plate side guiding channel	At an angle o	of 0° or 5°	
Wind resistance			
Wind classification EN13561:2004	3		
Wind tunnel test report	N°113-2	5809	
Guaranteed wind resistance	Up to 60 km/h in o	closed position	
Control			
Detecto Renson motor Safety First	~		
Somfy mechanic motor	~		
Somfy (Meastria*) IO radio-controlled motor	~		
Certificates			
Declaration of Performance (DoP)	DOP-2015SC00002		
Durability test report	WTCB N°651 XE823 CAR4139		

Dimensions		Fixscreen® 100 Slim	Fixscreen <sup>®</sup> 150
Single screen			
	Min. width	1000 mm	909 mm
Fibre glass fabric Sergé / Natté	Max. width	6000 mm	6000 mm
Soltis Veozip polyester fabric Tuffscreen insect mesh	Max. height	2800 mm	3000 mm
Turiscreen misect mesn	Max. surface area	16.8 m <sup>2</sup>	18 m²
	Min. width	1000 mm	-
Privacy fibre glass fabric	Max. width	4500 mm	-
	Max. height	2800 mm	-
	Max. surface area	12.6 m <sup>2</sup>	-

#### IOTE

- Fixscreen 150: It is recommended that at least two people install the product. Weight: ± 23 kg/rm.
- Head box extension not possible with side guiding channel D
- Plaster profile is optional
- Fixscreen 100 Slim F: Crystal window in the full width can be applied up to a maximum system width of 4500 mm.
- A wind sensor must be used for a finished height > 2800 mm.
- \*For Somfy Maestria IO the restrictions below apply: Fixscreen 100 Slim: Width ≥ 1200 mm - Height ≤ 2800 mm Fixscreen 150: Width ≥ 1200 mm
- Joining is not possible

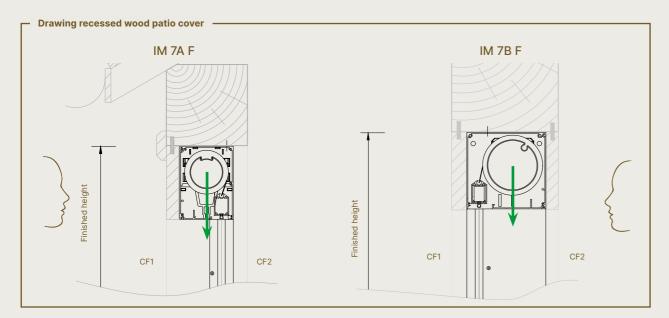


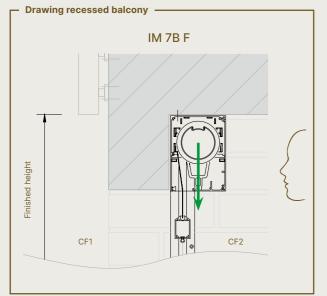
## Option crystal window in the full width

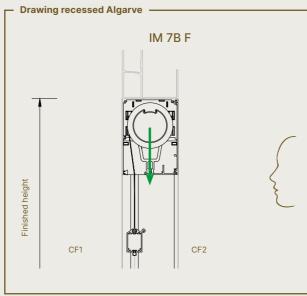
A crystal fabric can be chosen to maintain optimal contact with the outdoors. This is a transparent fabric that is integrated into a Fixscreen fibre glass fabric in a freestanding application. The crystal window in the full width of the screen is 1200 mm high. There must be a distance of 400 mm between the crystal window in the full width and the bottom.



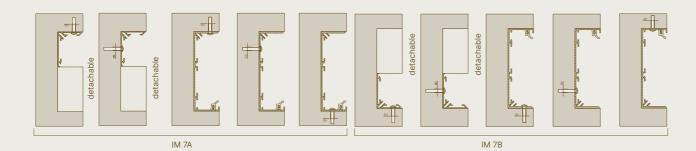




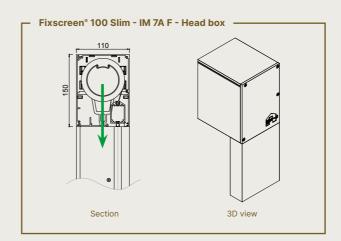


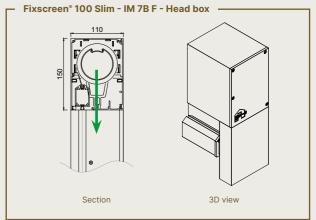


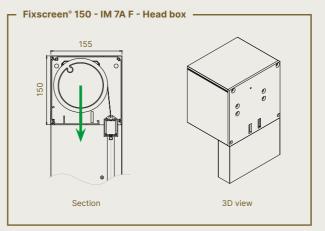
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed

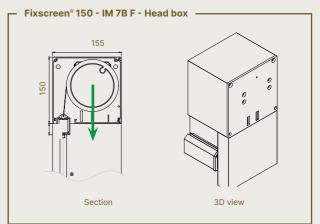


Note: When choosing the narrow side guiding channel G, the customer must foresee something detachable under the head box in order to be able to disassemble the fabric set underneath (H = min. 680 mm).





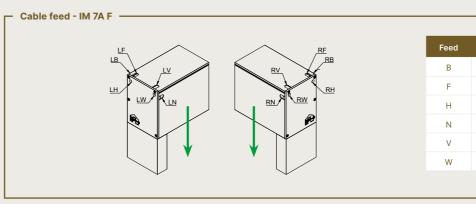


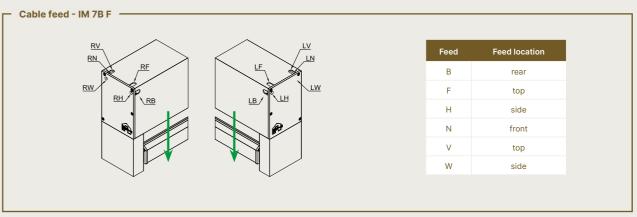


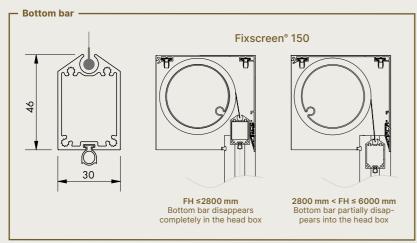
rear

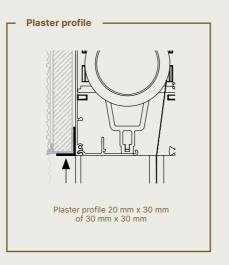
top

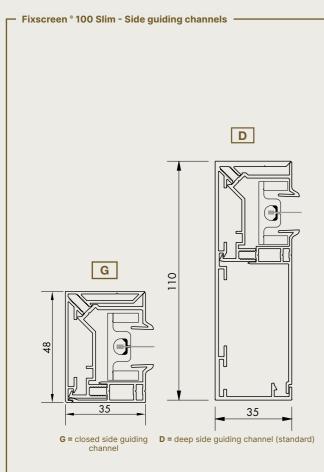
front top side

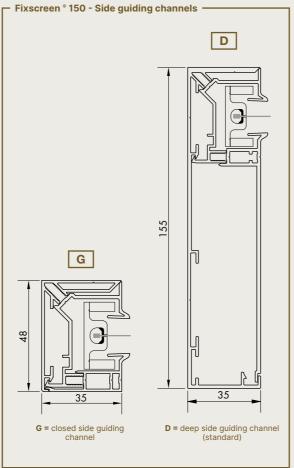


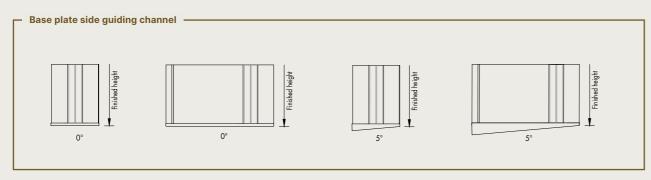












Viewing direction determines choice of left or right cable feed 

✓ direction in which fabric set should be removed 

✓ Window position





## FIXSCREEN® READY

The Fixscreen Ready principle entails that all necessary Fixscreen features (for later installation of a fabric set) are already available. Fixscreen Ready is a great solution for projects, series construction and apartment construction. It provides a lower threshold for providing fabric sun protection while still offering an integrated solution. This adds value to the residential unit, and customers can decide for themselves when to integrate a fabric set to increase living comfort.



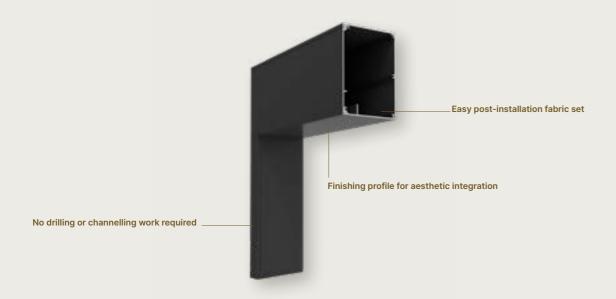


## **FIXSCREEN® READY**

## Recessed in front of the window IM 7

Installation method **7A** fabric close to the window Installation method **7B** fabric away from the window Combines perfectly with screen, door handle...













TECHNOLOGY TECHNOLOGY	
Design	Fixscreen® Ready 100 Slim
Head box dimensions (HxD)	150 mm x 110 mm
Head box extension	-
Square	✓
Softline	-
Retractable bottom bar	✓
Base plate side guiding channel	At an angle of 0° or 5°
Wind resistance	
Wind classification EN13561:2004	3
Wind tunnel test report	N°113-25809
Guaranteed wind resistance	Up to 130 km/h in closed position
Control	
Detecto Renson motor Safety First	<b>✓</b>
Somfy mechanic motor	✓
Somfy (Meastria*) IO radio-controlled motor	✓
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00002
Durability test report	WTCB N°651 XE823 CAR4139

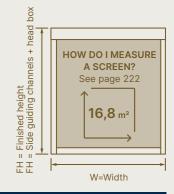
#### Dimensions

## Single screen

Fibre glass fabric Sergé/Natté	Min. width	700	mm
	Max. width	6000 mm	4000 mm
Soltis Veozip polyester fabric	Max. height	2800 mm	4000 mm
Tuffscreen insect mesh	Max. surface area	16.8 m <sup>2</sup>	16 m²
Privacy fibre glass fabric	Min. width	700	mm
	Max. width	4500 mm	3000 mm
Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Max. height	2800 mm	3500 mm
7 00100 1 01101111 02	Max. surface area	12.6 m <sup>2</sup>	10.5 m <sup>2</sup>
Blackout fibre glass fabric	Min. width	1000	mm
Satiné 21154	Max. width	400	mm
Blackout polyester fabric	Max. height	2800	mm
Soltis Opaque B92	Max. surface area	11.2	m²

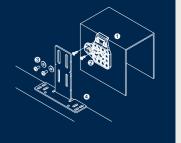
#### NOTE

- \*For Somfy Maestria IO the following restrictions apply: width ≥ 1600 mm height ≤ 2800 mm
- Choice of screen control, cable feed and side control are determined when ordering the empty head box.
- The warranty number for the empty head box provides all the information to order the fabric set: dimensions of the screens, installation method, motor and fabric selection.
- The warranty number can be found on the sticker on the internal side of the head box's finishing profile, and/or via the QR code on the visible side.
- Head box extension not possible
- Plaster profile and fixation bracket optional



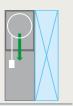
## Fixation bracket for rapid mounting

The fixation brackets offer a simple solution for rapid mounting to the window frame. The ingenious one-fits-all design of the fixation bracket ensures all screen types can be secured using the same accessory. More info on www.renson.eu/fixation-brackets

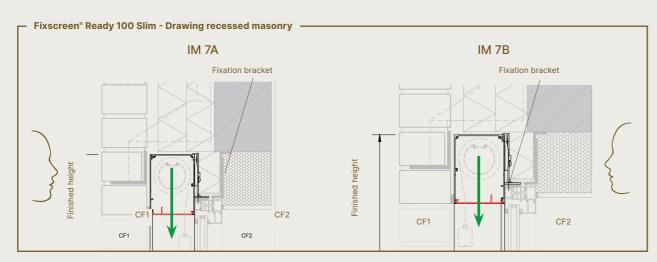


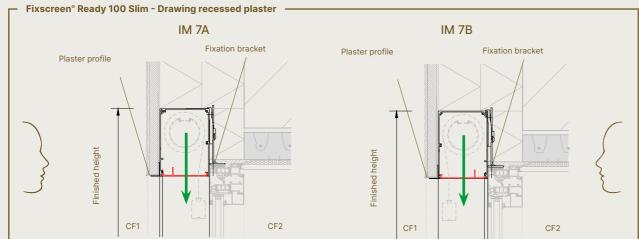
TIP: If a door handle, sliding door handle or fly screen could possibly prevent the free running of the fabric, choose installation method 7B. This ensures the fabric runs away from the window and free running is assured.

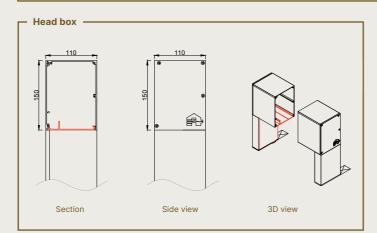


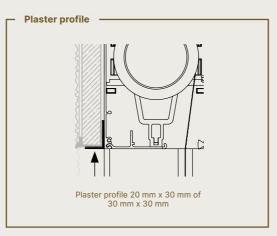


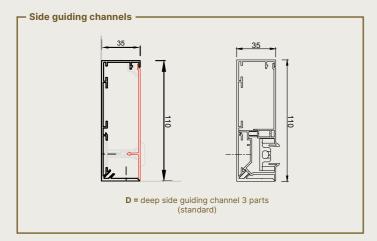


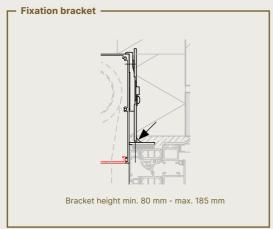


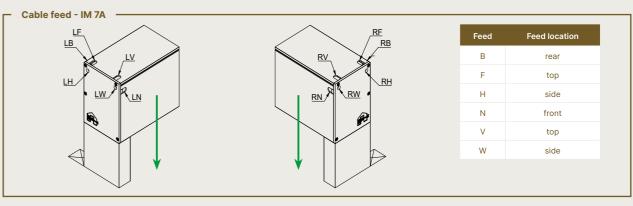


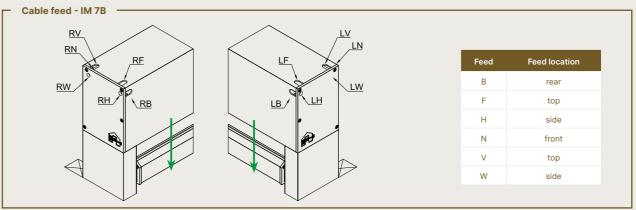
















## FIXSCREEN® MINIMAL

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 head 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: head box, side guiding channels, fabric set, dimensions, screen tension, etc. The result of these efforts being: minimal dimensions that enable a nearly invisible installation.





## FABRIC SET INSTALLATION

Thanks to the Fixscreen Minimal Connect&Go-technology, installing the fabric set is now even faster and safer. The integration of the Click&Safe technology ensures the fabric set can be clicked into the head box without screws so the installer has their hands free to complete the installation safely.







## SMOOTH-TECHNOLOGY

This aluminium inner rail also features the unique, successful **Smooth-technology** formula. This ensure the zip glides silently into the guiding channel that, in combination with the **Fixscreen-technology** guarantees high Wind resistance in the long term.



FIXSCREEN TECHNOLOGY



## EXTREME HIGH WIND GUARANTEE

In addition to the wind warranty up to 130 km/h in closed position for standard applications, there is also a high wind warranty up to 100 km/h for freestanding applications. Perfect for enjoying the balcony or patio with shelter from the sun.



## MINIMUM IMPACT ON THE ARCHITECTURE

Thanks to its smaller fabric box, the Fixscreen Minimal can be installed discretely, both surface-mounted (IM 1) and recessed (IM 7). The sleek lines and Square design of the head box keep the impact on the architecture to a minimum:

- 'Small' head box is 90 mm deep for dimensions up to 10 m<sup>2</sup>
- 'Medium' head box is 110 mm deep for dimensions up to 18 m<sup>2</sup>
- 'Large' head box is 130 mm deep for dimensions up to 27.8 m<sup>2</sup>

In addition to the head box, the side guiding channels and bottom bar also have a slimmer design. The side guiding channels have a view width of just 20 mm, which is unique in the market. The bottom bar has been redesigned with a height of just 35 mm.



Fixscreen Minimal IM1 Small



Fixscreen Minimal IM 7 Small



TIP: Fixscreen Minimal can also be perfectly and discreetly concealed inside, in combination with the quiet Sonesse motor.

## **EASE OF INSTALLATION**

With this new product range, the ease of installation was given the highest priority. The head box profile at the rear has, for example, a detail with various applications.

- For the surface-mounted installation, the head box can be mounted on a **hook profile**. For recessed installation, the head box can be secured via a **fixation bracket**. An easy and fast solution for both <u>surface-mounted</u> and recessed!
- For an easy <u>recessed</u> installation of 40 mm in front of the window, the Medium head box can be mounted to the **base box M.W+**. This option represents a total solution for combinations with minimalist windows and their typical reinforcement profiles.
- For <u>freestanding</u> applications, a **fill profile** is provided. This guarantees a beautiful finish for the head box

For even more convenient installation, the connection between the head box and the side guiding channel is achieved with a separate **adjustable pin**. In addition, the guiding channels for installation to the window are **pre-drilled**. The **bottom bar** can now be clicked free of the fabric with ease. This limits the weight during installation or allows for rapid disassembly. A new detachable click-profile on the **fabric tube** minimises not only horizontal line formation in the fabric, but also ensures that you can easily and quickly click the fabric out of the fabric tube.





## A GUIDING CHANNEL FOR EVERY APPLICATION

The Fixscreen Minimal range has a wide selection of side guiding channels, which allows combinations with any type of window. The **XS**-side guiding channel, extremely slim at just 20 mm x 55 mm. Ideally suited for both surface-mounted and recessed use on classic as well as fine window frames.

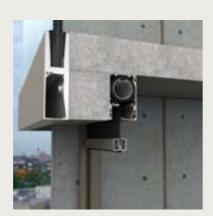




XS-side guiding channel

The deep recessed side guiding channel (S/M/L) is mainly used in freestanding applications. This type is matched to the depth of the corresponding head box and is installed **sideways** to the structure.





M side guiding channel

In addition to a guiding channel for sideways installation, the Fixscreen Minimal IM 7 application also has two types of side guiding channels for **fixation on the window frame**.

- The Window Front (.WF) type for Frontal fixation on the window frame.
- The Window Side (.WS) type for Sideways fixation on the window frame.

Both types are available for any type of head box (S.WF/S.WS – M.WF/M.WS – L.WF/L.WS), (S.WF/S.WS – M.WF/M.WS – L.WF/L.WS), as well as in an expanded '+' version in combination with the base box M.W+ (M.WF+/M.WS+). Thanks to the integrated rubber detail on the rear, these side guiding channels also guarantee a rain-proof combination with the window!



M.WF side guiding channel



M.WS side guiding channel



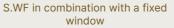


M.WF+ side guiding channel

M.WS+ side guiding channel

Depending on the type of window, front or sideways fixation on the window will be more suitable. The .WF side guiding channels will now be a perfect combination with minimalist window frames, as well as wider standard window frames.



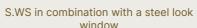




M.WF+ in combination with C.F and a minimalist window

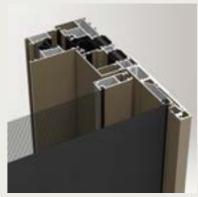
The .WS guiding channels in turn are a perfect match for slim steel look windows, modern narrow (sliding) windows, as well as for combinations with (sliding) insect screens even with minimalist windows, and for all combinations with an Invisivent window louvre. As standard, the guiding channels are pre-drilled to reduce installation speed.







L.WS in combination with a sliding window



M.WS+ in combination with a sliding window and sliding screen

The range is completed with two coupling side guiding channels, the C.40 and the C.F.

- The **C.40** coupling side guiding channel is installed on the window frame and allows two screens to be Coupled together, with a maximum overall width of 10 m. Application in IM1 or IM 7A.
- The **C.F** coupling side guiding channel is a unique freestanding coupling side guiding channel that is used with the Medium head box in IM 7B. In this case, the coupling side guiding channel is installed completely separate from the window and up to 3 parts can be connected, with a maximum total width of 12 m. This total solution is ideal for minimalist sliding windows with reinforcement profiles or outward-sliding windows.



C.40 - Coupling side guiding channel for IM 7A



C.F - Freestanding coupling side guiding channel for Medium IM 7B

# FIXSCREEN® MINIMAL SURFACE-MOUNTED





## **FIXSCREEN® MINIMAL**

## Surface-mounted IM 1

















Design	Small	Large		
Head box dimensions (HxD)	100 mm x 90 mm	120 mm x 110 mm	140 mm x 130 mm	
Head box extension		-		
Square		<b>✓</b>		
Retractable bottom bar		-		
Base plate side guiding channel	La	cquered aluminium 0° or	5°	
Wind resistance				
Wind classification EN13561:2004		3		
Wind tunnel test report	WTT17-003			
Guaranteed wind resistance	Up to 130 km/h ir	closed position dependi	ng on dimensions	
Control				
Detecto Renson motor Safety First		<b>✓</b>		
Somfy IO radio-controlled motor		~		
Somfy Sonesse* IO radio-controlled motor	<b>✓</b>			
Certificates				
Declaration of Performance (DoP)	DOP-2015SC00006			

<sup>\*</sup> Only for indoor application

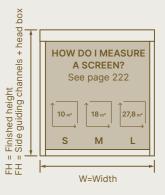
Dimensions		Small		Medium			La	rge	
Single screen									
	Min. width Somfy IO	900	mm	900	mm		900	mm	
Fibre glass	Min. width Detecto	670	mm	670	mm		670	mm	
fabric Sergé / Natté	Max. width	4000 mm	3200 mm	5000 mm	4500 mm	6000 mm	5600 mm	4800 mm	3600 mm
/ Privacy	Max. height	2500 mm	3000 mm	3500 mm	4000 mm	3800 mm	4500 mm	5800 mm	6000 mm
	Max. surface area	10 m <sup>2</sup>	9.6 m <sup>2</sup>	17.5 m <sup>2</sup>	18 m²	22.8 m <sup>2</sup>	25.5 m <sup>2</sup>	27.8 m <sup>2</sup>	21.6 m <sup>2</sup>
	Min. width Somfy IO	900	900 mm		900 mm		900 mm		
	Min. width Detecto	670	mm	670	mm		670	mm	
Tuffscreen insect mesh	Max. width	4000 mm	3200 mm	5000 mm	4500 mm	5000	) mm	4500	) mm
mocot mesn	Max. height	2500 mm	3000 mm	3500 mm	4000 mm	3500	) mm	4000	) mm
	Max. surface area	10 m <sup>2</sup>	9.6 m <sup>2</sup>	17.5 m <sup>2</sup>	18 m²	17.5	5 m²	18	m²
	Min. width Somfy IO	900	mm	900 mm		900 mm			
Blackout fibre	Min. width Detecto	670	670 mm		670 mm		670 mm		
glass fabric	Max. width	3200	3200 mm		4000 mm		4000 mm		
Satiné 21154	Max. height	2500	2500 mm		4000 mm		4000 mm		
	Max. surface area	8	8 m²		m²	16 m²			

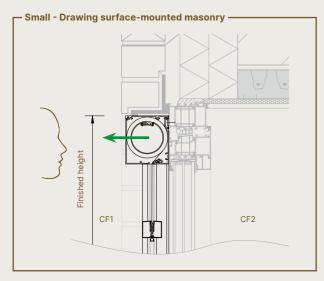
## Linked screens

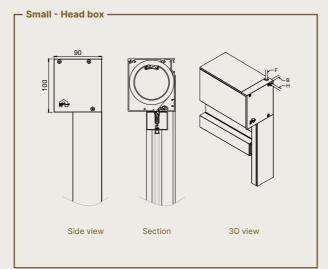
The dimensions of a single screen also apply to an interconnected screen. Maximum total width of 10,000 mm.

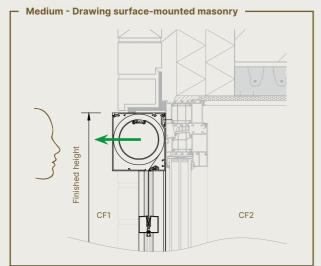
### Fixation:

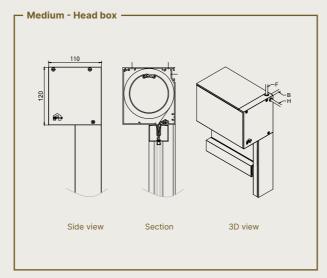
- Small head box does not need to be secured.
- Medium head box must be secured centrally starting from a width > 3600 mm
- Large head box must be secured to the sides, extra central securing required from a width > 3600 mm.

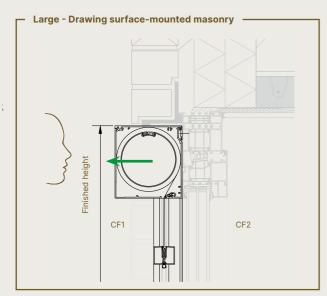


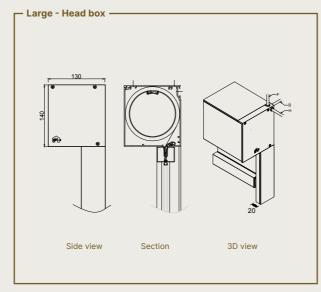






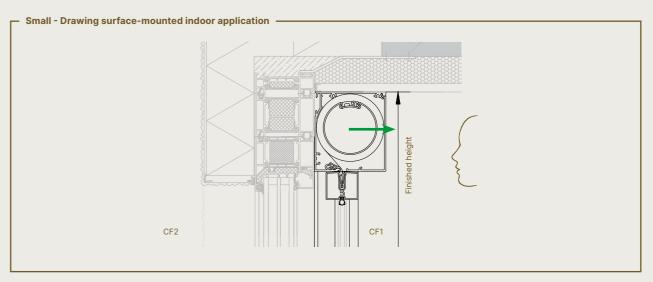




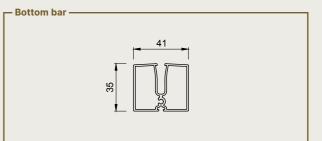


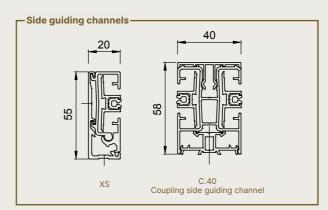
Viewing direction determines choice of left or right cable feed

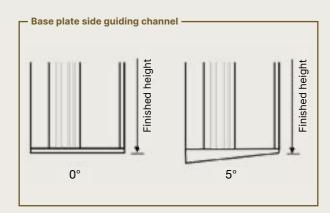
Make sure you use the correct viewing direction in indoor applications.

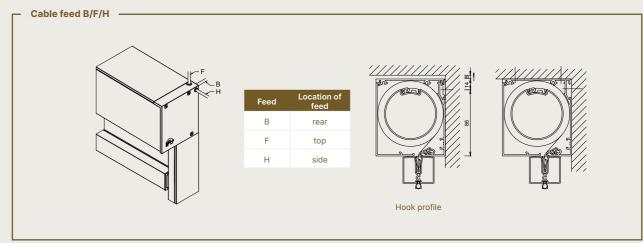












# FIXSCREEN® MINIMAL SOLAR



**Surface-mounted IM 1** 













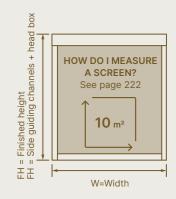
Design	Small
Head box dimensions (HxD)	115 mm x 90 mm
Head box extension	-
Square	✓
Retractable bottom bar	-
Base plate side guiding channel	Lacquered aluminium 0° or 5°
Fabric tube with click-profile	✓
Wind resistance	
Wind classification EN13561:2004	3
Wind tunnel test report	WTT22-001
Guaranteed wind resistance	Up to 130 km/h in closed position
Control	
Somfy radio-controlled motor	~
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00006

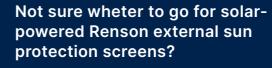
Dimensions		Small	
Single screen			
	Min. width Somfy	750 m	ım
Fibre glass fabric Sergé / Natté / Privacy	Max. width	4000 mm	3200 mm
Tuffscreen insect mesh	Max. height	2500 mm	3000 mm
Turiscicci insect mesii	Max. surface area	10 m <sup>2</sup>	9.6 m <sup>2</sup>
	Min. width Somfy	750 mm	
Blackout fibre glass fabric	Max. width	3200 mm	
Satiné 21154	Max. height	2500 mm	
	Max. surface area	8 m	2
Linked screens			

## The dimensions of a single screen also apply to an interconnected screen. Maximum total width of 10,000 mm.

NOTE Fixation:

- Small head box does not need to be secured.

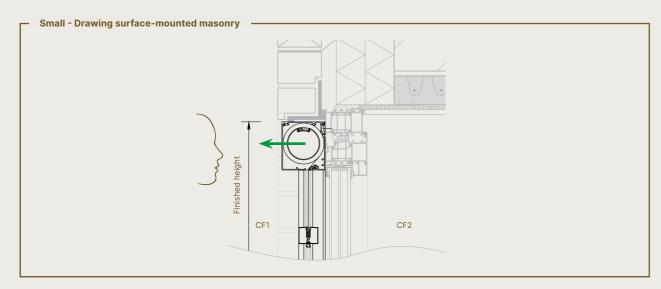


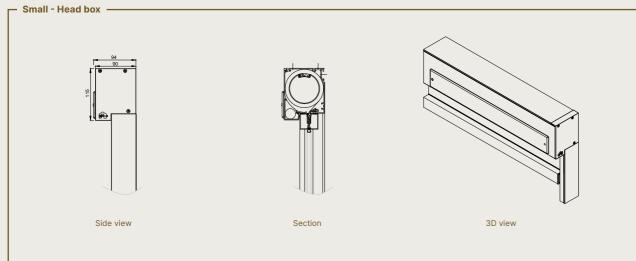




The Somfy Solar app allows you to determine in advance, and in a specific environment, the capabilities of a Solar solution. Available for free in the App store and via Google Play.

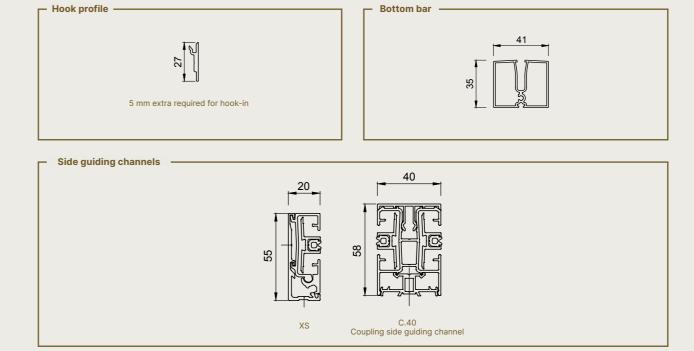


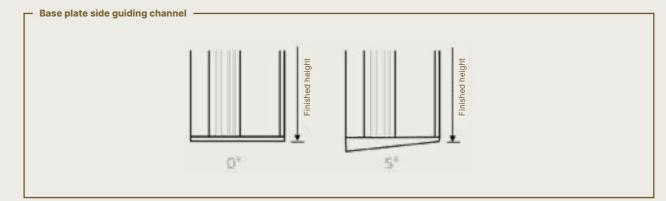




Viewing direction determines choice of left or right cable feed

Make sure you use the correct viewing direction in indoor applications.





# FIXSCREEN® MINIMAL RECESSED

reddot winner 2022





## **FIXSCREEN® MINIMAL**

## Recessed in front of the window IM 7

Installation method **7A**, fabric close to the window Installation method **7B**, fabric away from the window Combines perfectly with screen, door handle...















Design	Small	Large			
Head box dimensions (HxD)	140 mm x 90 mm 160 mm x 110 mm 180 mm x 1				
Head box extension		-			
Square		~			
Retractable bottom bar		~			
Base plate side guiding channel	La	acquered aluminium 0° or	5°		
Fabric tube with click-profile		~			
Wind resistance					
Wind classification EN13561:2004		3			
Wind tunnel test report		WTT17-001			
Guaranteed wind resistance	Up	to 130 km/h in closed pos	ition		
Control					
Detecto Renson motor Safety First		<b>✓</b>			
Somfy IO radio-controlled motor*	~				
Somfy Sonesse* IO radio-controlled motor	✓				
Certificates					
Declaration of Performance (DoP)	DOP-2015SC00006				

<sup>\*</sup> Only for indoor application



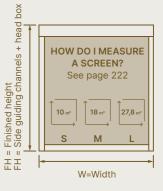
#### Linked screens IM 7A

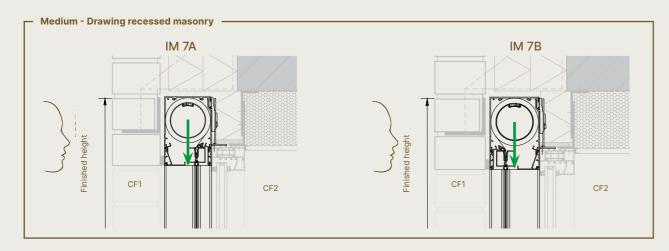
The dimensions of a single screen also apply to an interconnected screen. Maximum total width of 10,000 mm.

### NOTE

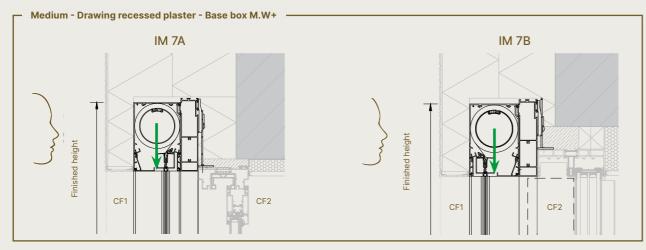
#### Eivation:

- Small head box does not need to be secured.
- Medium head box must be secured centrally starting from a width > 3600 mm
- Large head box must be secured starting from a width > 3600 mm. In combination with the XS guiding channel, additional securing is required at the sides, regardless of the system width.

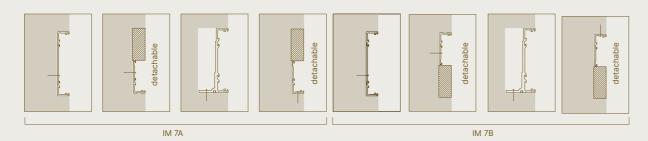




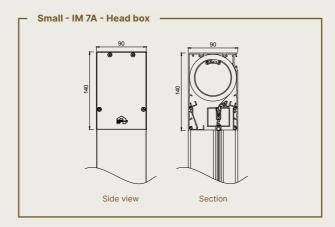


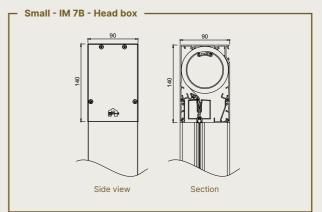


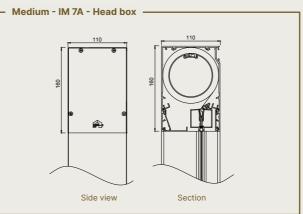
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed

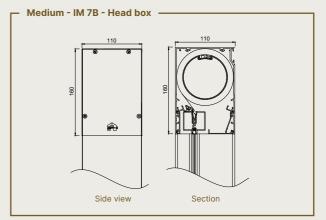


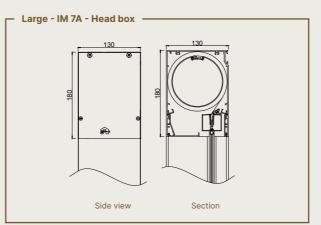
Note: When choosing the narrow side guiding channel XS, the customer must foresee something detachable under the head box in order to be able to disassemble the fabric set underneath (H = min. 680 mm).

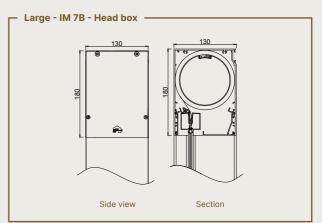


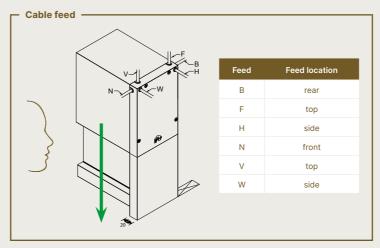


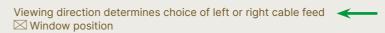


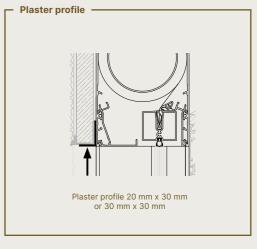




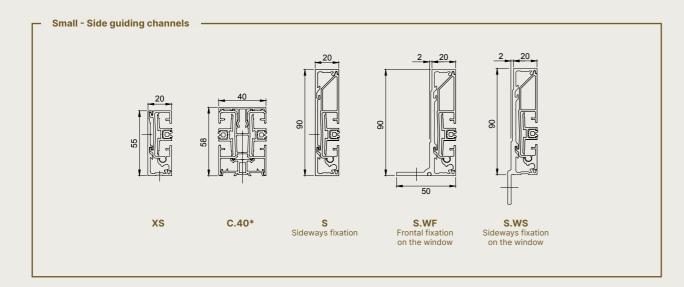


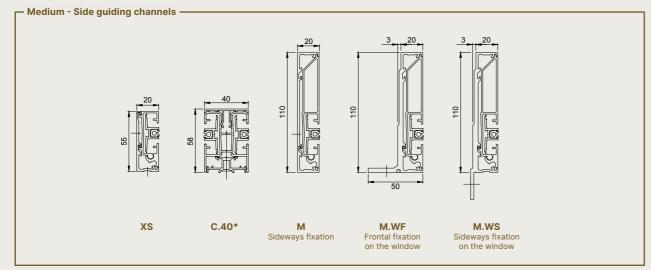


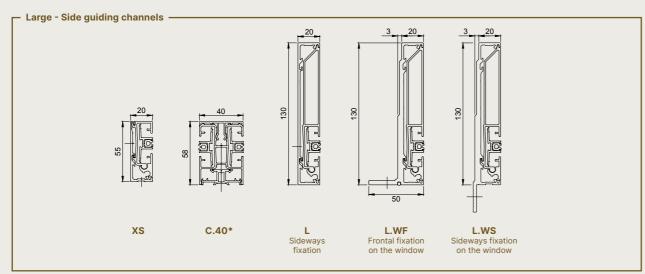




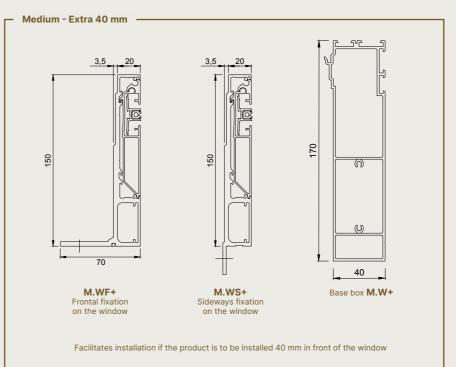
direction in which fabric set should be removed

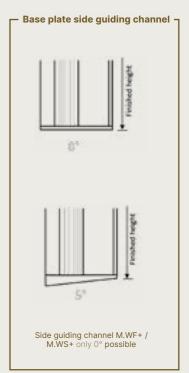


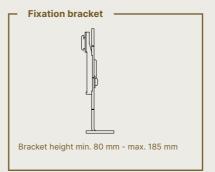


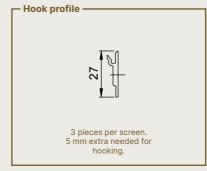


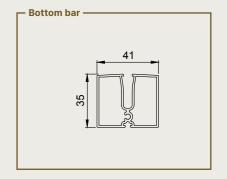
<sup>\*</sup> Only possible with IM 7A







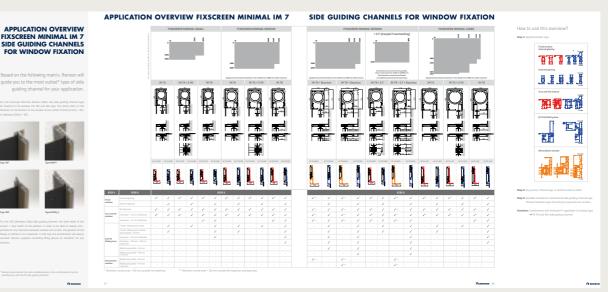




## WHICH SIDE GUIDING CHANNEL FOR WHICH TYPE OF WINDOW?

Consult the **Fixscreen Minimal application matrix for window installation**. Based on this matrix, Renson will guide you to the most suitable type of side guiding channel for your application.





Fixscreen Minimal application matrix for window installation

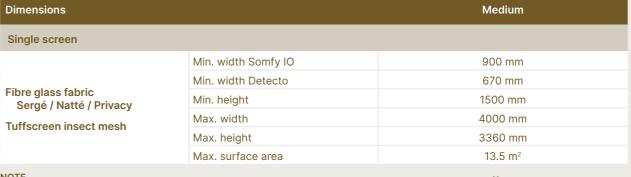
RENSON®

## **FIXSCREEN® MINIMAL**

Recessed in front of the window IM 7B with freestanding coupling side guiding channel (C.F.)





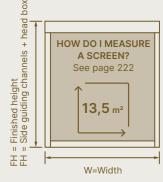


### NOTE

- Only possible for IM 7B. Completely freestanding (F) application of the IM 7B C.F. is not permitted.
- Head box must be installed concealed to prevent thermal expansion of the head boxes.
- Connection of up to 3 screens is possible when using the freestanding coupling guide (C.F), with a total maximum width of 12000 mm. Dimensions of a single screen apply for the connected screens.

The head boxes must be secured such that they remain suspended autonomously. Maximum total force to be supported by the top/rear construction is 1500 N per freestanding coupling side guiding channel, C.F.

- Hook the box onto the hook profile and fixate on 3 additional points
- Hook the box onto the base box M.W+ and fixate on 3 additional points to the base box M.W+













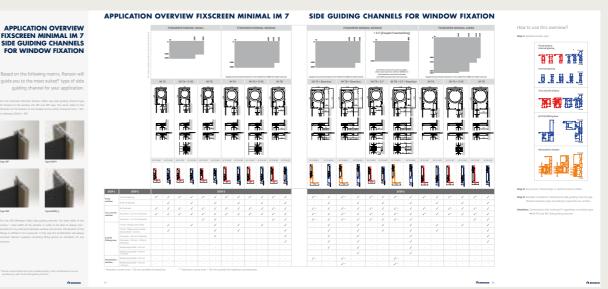


TECHNOLOGY TECHNOLOGY	<u> </u>
Design	Medium
Head box dimensions (HxD)	160 mm x 110 mm
Head box extension	-
Square	✓
Retractable bottom bar	✓
Base plate side guiding channel	Lacquered aluminium 0° or 5°
Fabric tube with click-profile	✓
Wind resistance	
Wind classification EN13561:2004	3
Wind tunnel test report	-
Guaranteed wind resistance	Up to 80 km/h in closed position
Control	
Detecto Renson motor Safety First	~
Somfy IO radio-controlled motor	~
Certificates	
Declaration of Performance (DoP)	DOP-2015SC00006

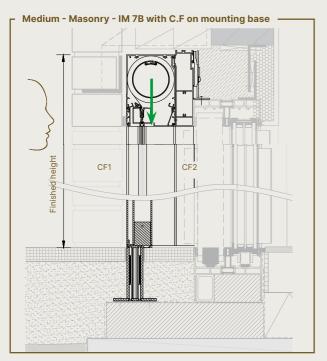
## WHICH SIDE GUIDING CHANNEL FOR WHICH TYPE OF WINDOW?

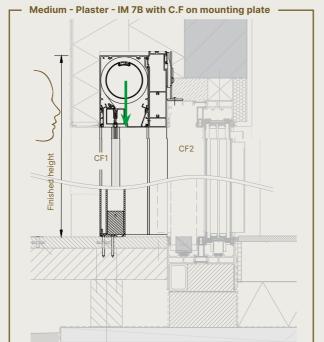
Consult the Fixscreen Minimal application matrix for window installation. Based on this matrix, Renson will guide you to the most suitable type of side guiding channel for your application.

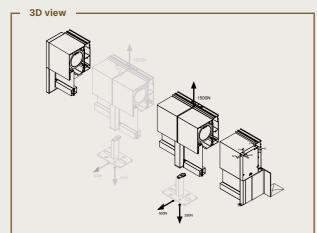


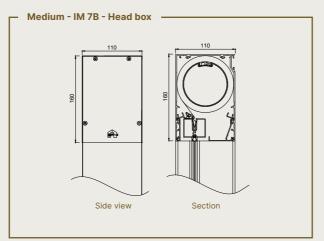


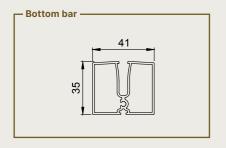
Fixscreen Minimal application matrix for window installation

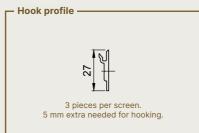




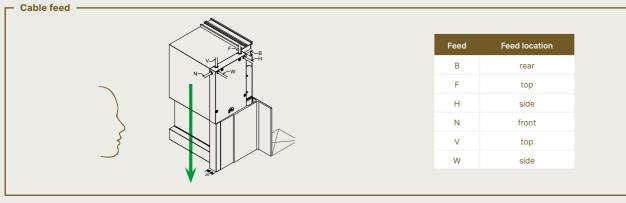




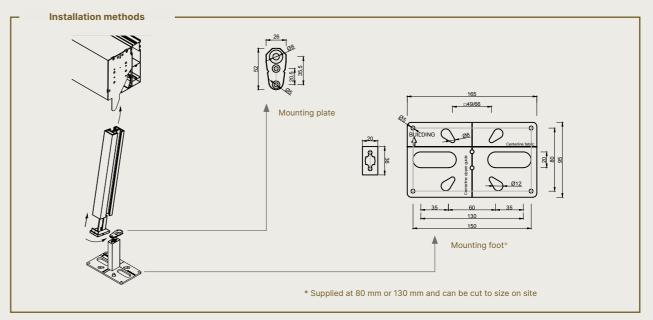


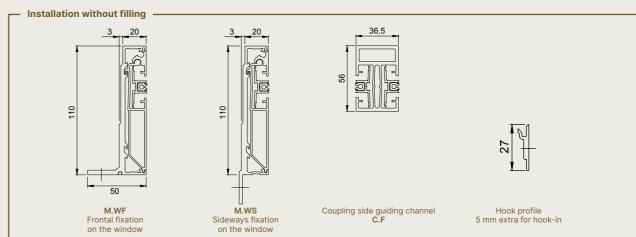


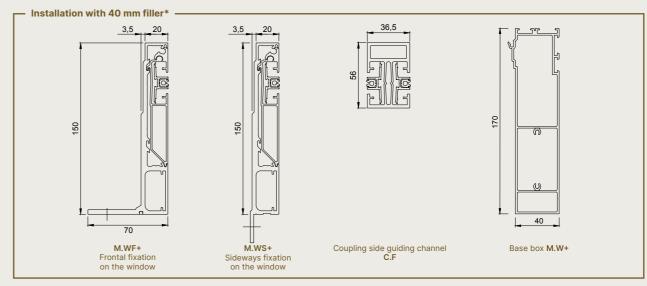




Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed

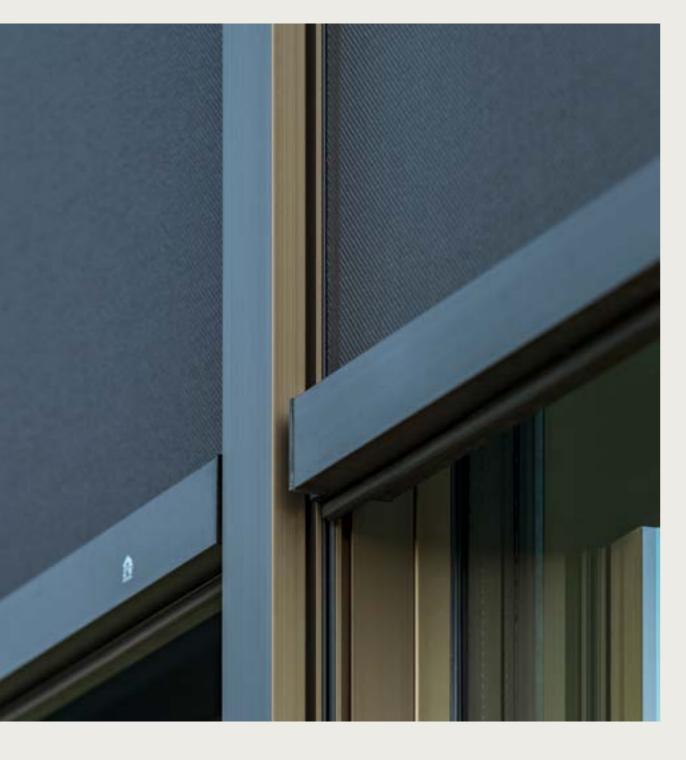






<sup>\*</sup> Guarantees easy installation in combination with side guiding channel M.W+ if the screen must be installed 40 mm in front of the window.

# FIXSCREEN® MINIMAL CURTAIN WALL





## CURTAIN WALLS AND FABRIC SUN PROTECTION

Curtain walls are becoming more and more common in contemporary architecture. The curtain wall has found its way into not only commercial buildings, but residential buildings as well. When using such large glass panels, it is important not to overlook interior comfort. Sufficient daylight inside is a good thing, but outdoor sun protection helps to keep the indoor temperature under control.

## **Product range**

In order to nicely integrate this fabric sun protection, Renson® has made a unique development within its product range. Now that you can attach **coupling side guiding channels centrally**, there is nothing to prevent easy installation of the sun protection to the curtain wall transoms itself. The **thermal expansion** of the box was also considered in the design, so that an infinite number of screens can coupled.

## **Curtain wall solution**

The curtain wall solution from Renson is based on the Fixscreen Minimal range, in the form of the **Fixscreen Minimal Curtain Wall 50**.

With its minimalist look, the Fixscreen Minimal Curtain Wall 50 is also a perfect match for curtain wall designs. A central mounting to the curtain wall is additionally ensured by the design of the side guiding channel of just 50 mm. Furthermore, the fabric box is equipped for thermal expansion, allowing it to be infinitely interconnected. A must in combination with curtain walls!



Recessed application

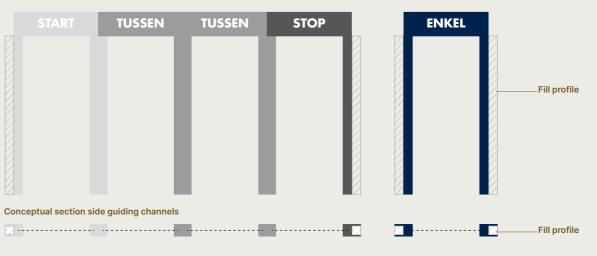


Surface-mounted application

## How to combine screens with a curtain wall?

For curtain walls, Renson offers the choice between a single screen, or a series of screens over the entire glass facade. If a series of screens is needed, the installation starts with the start screen. This consists of two coupling side guiding channels, the outer one of which contains a fill profile that will replace the zip channel to ensure an aesthetically pleasing finish. This start screen is followed by the required amount of intermediate screens. The last screen is a stop screen, which also contains a fill profile at the end.

## Conceptual view

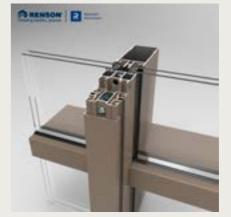


## Cooperative development



What makes this product even more unique is that it is also available as a co-developed, validated system. Renson and Reynaers Aluminium have joined forces for the ultimate combination of curtain walls and fabric sun protection. The combination of both forms of innovation results in an aesthetic total curtain wall solution that is easy to install without losing an eye for detail. Using the unique side guiding channel C.50 Reynaers Aluminium, the Fixscreen Minimal Curtain Wall 50 seamlessly connects to Reynaers Aluminium's curtain wall system. The result is a unique, tested and validated all-in-one solution.





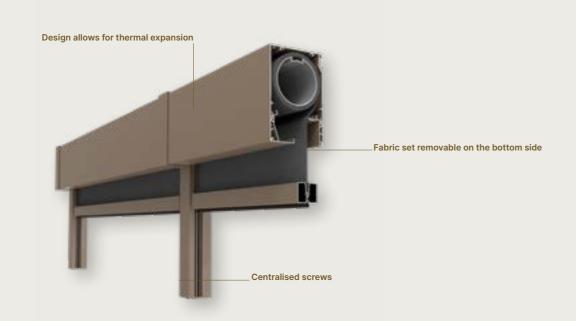


RENSON

# FIXSCREEN® MINIMAL CURTAIN WALL 50



**Surface-mounted IM 7A** 











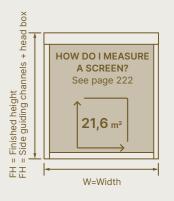


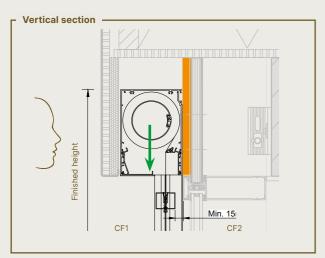
Design	Medium	Large		
Head box dimensions (HxD)	160 mm x 110 mm	180 mm x 130 mm		
Square	~			
Retractable bottom bar	·	,		
Base plate side guiding channel	At an ang	gle of 0°		
Fabric tube with click-profile	·	,		
Wind resistance				
Wind classification EN13561:2004	3			
Wind tunnel test report	WTT17-001 (Standard)			
Guaranteed wind resistance	Up to 130 km/h in closed position			
Control				
Detecto Renson motor Safety First	<b>✓</b>			
Somfy IO radio-controlled motor	V			
Certificates				
Declaration of Performance (DoP)	DOP-2015	SC00006		

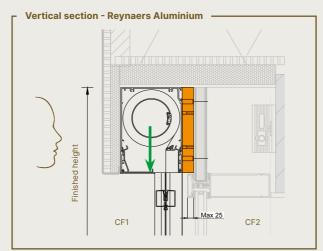
Dimensions		Medium	Large
Single screen			
	Min. width Somfy IO	900 mm	900 mm
Fibre glass fabric Sergé / Natté / Privacy	Min. width Detecto	670 mm	670 mm
	Max. width	3600 mm	3600 mm
	Max. height	4000 mm	6000 mm
	Max. surface area	14.4 m <sup>2</sup>	21.6 m <sup>2</sup>
	Min. width Somfy IO	900 mm	900 mm
Blackout fibre glass fabric Satiné 21154	Min. width Detecto	670 mm	670 mm
	Max. width	3600 mm	3600 mm
Oddino 21104	Max. height	4000 mm	4000 mm
	Max. surface area	14.4 m <sup>2</sup>	14.4 m <sup>2</sup>

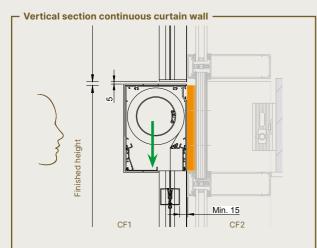
#### NOTE

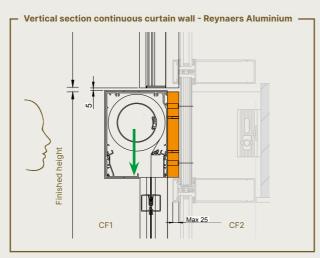
- Thermal expansion and contraction is taken into account to allow infinite coupling of the screens, which limits the maximum width to 3600 mm.
- The finishing profile is provided as standard on the outside of both start and last screen. It is optional for other coupling side guiding channels.
- Installation is always from start screen to last screen and the start screen is always on the left.
- Installation of the last screen requires an additional installation width of 30 mm.
- Combination with curtain wall system to be validated in consultation with system supplier. The product combination with the ConceptWall 50 must be configured in accordance with Reynaers Aluminium specifications and through a Reynaers Aluminium partner.

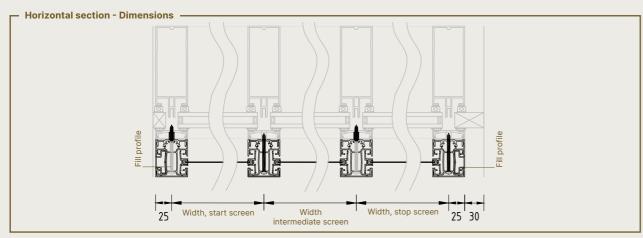


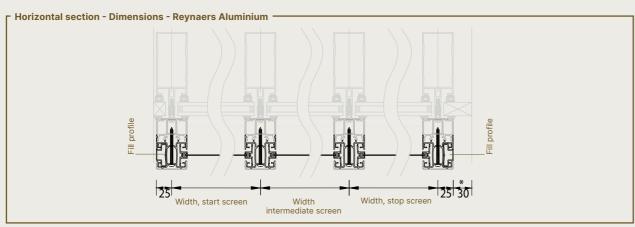


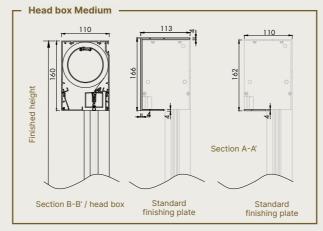


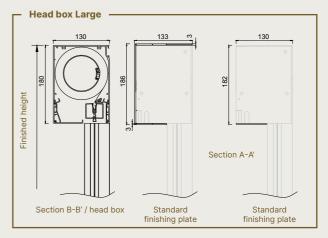


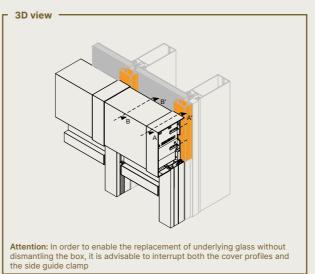


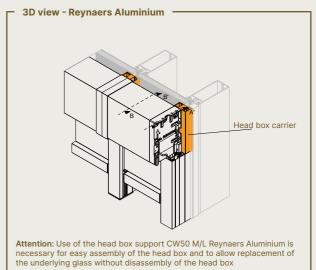


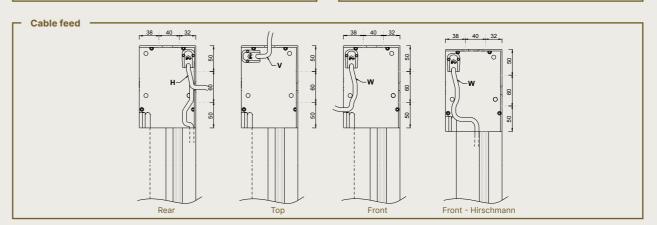




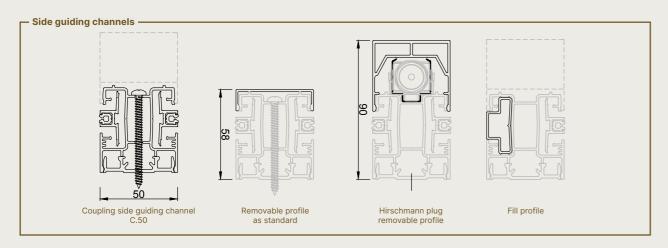


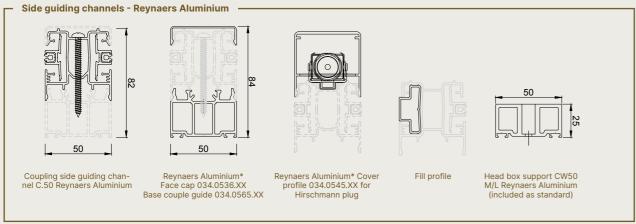




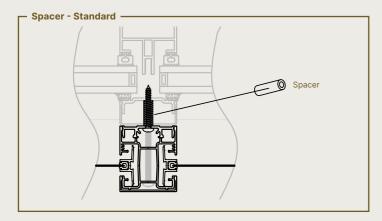


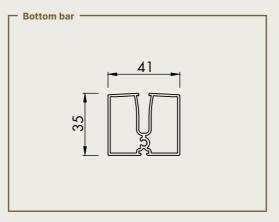
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed





\*To be ordered via Reynaers Aluminium





Note: Spacer can be provided depending on the type of cover profile for the curtain wall system. N/A for the Reynaers Aluminium version.



# FIXSCREEN® MINIMAL FREESTANDING





## **FIXSCREEN® MINIMAL**

## Freestanding IM 1F















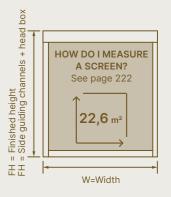
Design	Small	Medium	Large			
Head box dimensions (HxD)	100 mm x 90 mm	120 mm x 110 mm	140 mm x 130 mm			
Head box extension		-				
Square		<b>~</b>				
Retractable bottom bar		-				
Base plate side guiding channel	Li	acquered aluminium 0° or	5°			
Fabric tube with click-profile		<b>~</b>				
Wind resistance						
Wind classification EN13561:2004		3				
Wind tunnel test report		WTT117-003				
Guaranteed wind resistance	Up	Up to 100 km/h in closed position				
Control						
Detecto Renson motor Safety First		<b>✓</b>				
Somfy IO radio-controlled motor		~				
Certificates						
Declaration of Performance (DoP)		DOP-2015SC00006				

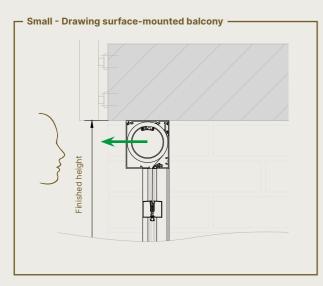
Dimensions		Small		Medium		Large	
Single screen							
	Min. width	900	mm	900	mm	900	mm
Fibre glass fabric	Max. width	4000 mm	3200 mm	5000 mm	4500 mm	6000 mm	4500 mm
Sergé / Natté / Privacy	Max. height	2500 mm	3000 mm	3500 mm	4000 mm	3800 mm	4000 mm
	Max. surface area	10 m <sup>2</sup>	9.6 m <sup>2</sup>	17.5 m <sup>2</sup>	18 m <sup>2</sup>	22.8 m <sup>2</sup>	18 m <sup>2</sup>
	Min. width	900	mm	900	mm	900	mm
Tuffscreen insect mesh	Max. width	4000 mm	3200 mm	5000 mm	4500 mm	5000 mm	4500 mm
	Max. height	2500 mm	3000 mm	3500 mm	4000 mm	3500 mm	4000 mm
	Max. surface area	10 m <sup>2</sup>	9.6 m <sup>2</sup>	17.5 m <sup>2</sup>	18 m <sup>2</sup>	17.5 m <sup>2</sup>	18 m²

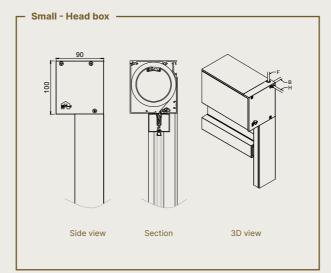
#### OTE

### Fixation:

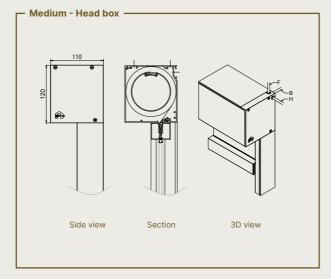
- Small head box does not need to be secured.
- Medium head box must be secured centrally starting a width > 3600 mm
- Large head box must be secured starting from a width > 3600 mm. Mandatory securing at the sides when using XS side guiding channel

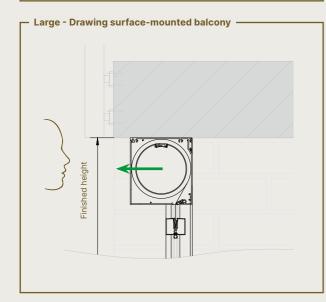


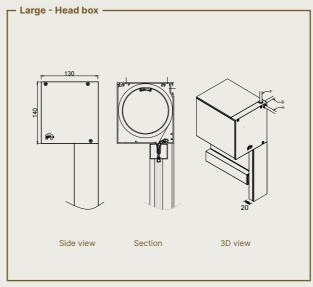






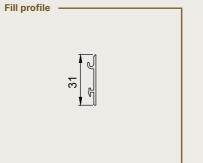


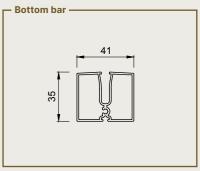


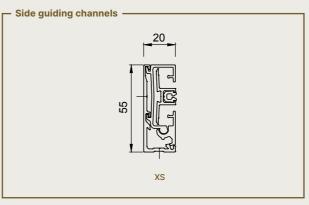


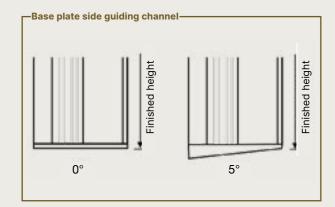
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed Make sure you use the correct viewing direction in indoor applications.

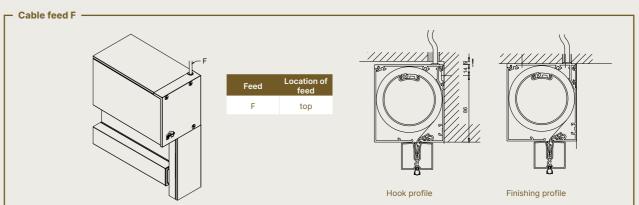


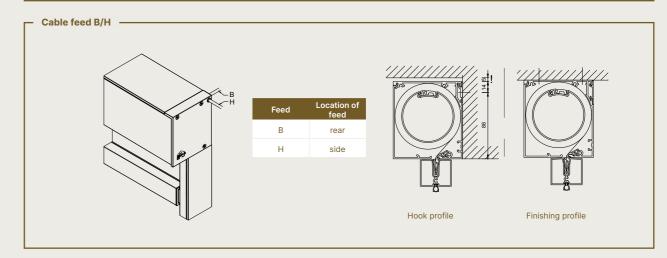








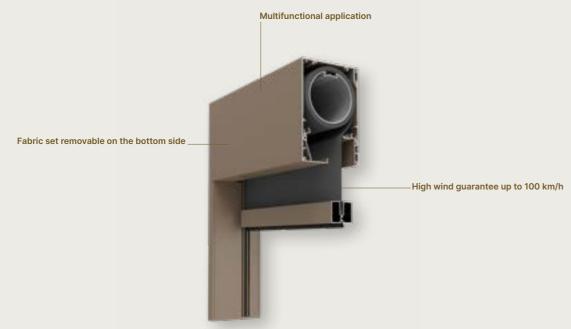




## FIXSCREEN® MINIMAL

## Freestanding IM 7 F















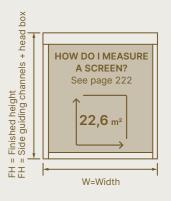
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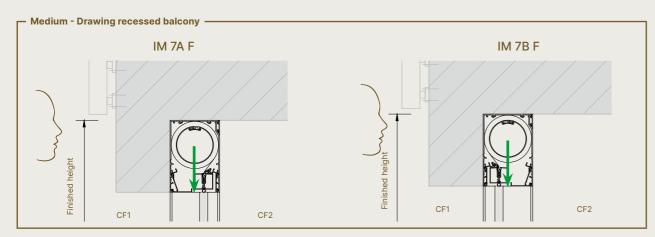
Design	Small	Medium	Large			
Head box dimensions (HxD)	140 mm x 90 mm	160 mm x 110 mm	180 mm x 130 mm			
Head box extension		-				
Square		~				
Retractable bottom bar		~				
Base plate side guiding channel	L	acquered aluminium 0° or	5°			
Fabric tube with click-profile		<b>~</b>				
Wind resistance						
Wind classification EN13561:2004		3				
Wind tunnel test report		WTT117-003				
Guaranteed wind resistance	Up to 100 km/h i	Up to 100 km/h in closed position depending on dimensions				
Control						
Detecto Renson motor Safety First		~				
Somfy IO radio-controlled motor		~				
Cerfiticates						
Declaration of Performance (DoP)		DOP-2015SC00006				

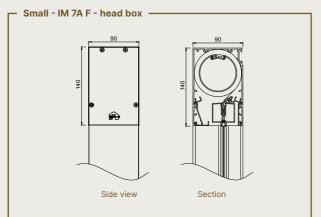
Dimensions		Small		Medium		Large	
Single screen							
	Min. width	900	mm	900	mm	900	mm
Fibre glass fabric	Max. width	4000 mm	3200 mm	5000 mm	4500 mm	6000 mm	4500 mm
Sergé / Natté / Privacy	Max. height	2500 mm	3000 mm	3500 mm	4000 mm	3800 mm	4000 mm
	Max. surface area	10 m <sup>2</sup>	9.6 m <sup>2</sup>	17.5 m <sup>2</sup>	18 m <sup>2</sup>	22.8 m <sup>2</sup>	18 m <sup>2</sup>
	Min. width	900	mm	900	mm	900	mm
Tuffscreen insect mesh	Max. width	4000 mm	3200 mm	5000 mm	4500 mm	5000 mm	4500 mm
	Max. height	2500 mm	3000 mm	3500 mm	4000 mm	3500 mm	4000 mm
	Max. surface area	10 m <sup>2</sup>	9.6 m <sup>2</sup>	17.5 m <sup>2</sup>	18 m <sup>2</sup>	17.5 m <sup>2</sup>	18 m <sup>2</sup>

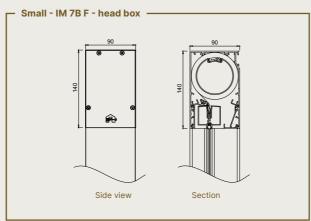
### Fixation:

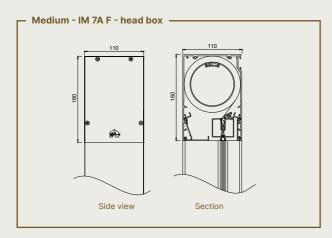
- Small head box does not need to be secured.
- Medium head box must be secured centrally starting from a width > 3600 mm
- Large head box must be secured starting from a width > 3600 mm. Mandatory securing at the sides when using XS side guiding channel

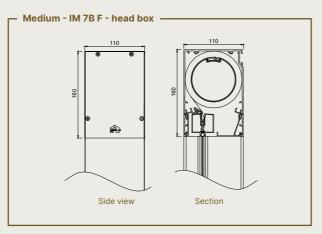


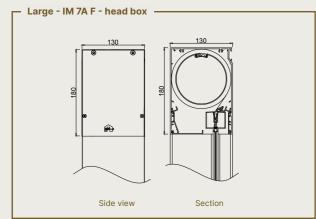


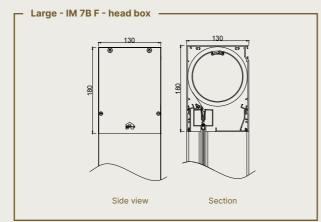


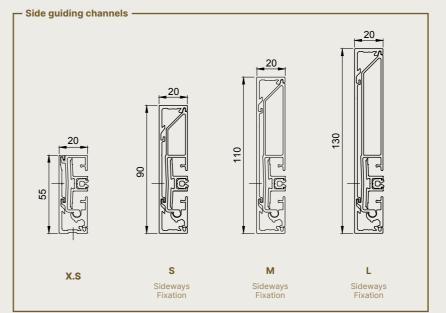


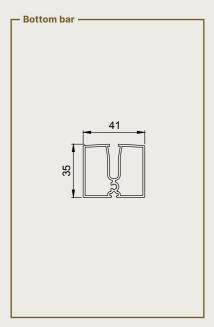


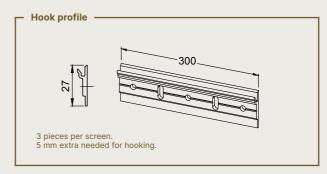


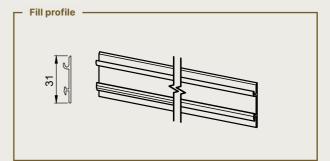


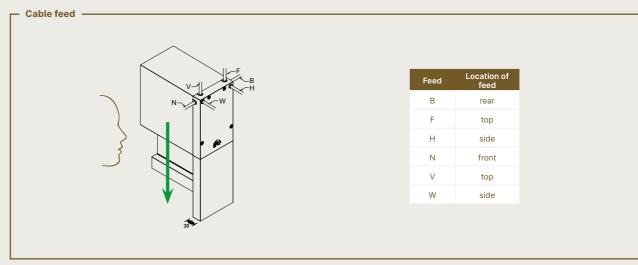












Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed

# PANOVISTA® (MAX)







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

The Panovista (Max) is the first fabric sun protection for glass-on-glass corner windows, which is perfectly in line with modern architecture for large glass sections and minimalistic design.

## 1. Uninterrupted panoramic view

Panovista (Max) is an ideal solution for glass-onglass windows. There are no aluminium profiles or cables visible in the corner, so the panoramic view is fully preserved.

## 2. Invisible integration

The Panovista (Max) has been designed so that both the head box and side guiding channels can be completely aesthetically concealed in the façade. The bottom bar is also fully retractable on the Panovista.

## 3. Suitable for large glass surfaces

Panovista (Max) has been developed to provide large glass surfaces with fabric sun protection, perfectly in line with current market trends. The Panovista can cover a total surface area of 22.4 m<sup>2</sup> and the Panovista Max even goes up to 30 m<sup>2</sup>.

## 4. High wind guarantee

The patented **Fixscreen-technology** always guarantees tightly tensioned fabrics. The zip is optimally attached to the fabric and remains firmly in place in the side guiding channels. Even at high wind speeds up to up to 90 km/h (Panovista Max).

## 5. Connect&Go-technology

The different types of motors that ca be used are equipped with a **Connect&Go**. This patented electrical connection guarantees quick and safe installation of the fabric set. Not only the installation but also the disassembly is therefore particularly efficient.

## 6. Durable guiding of the fabric

Increase the comfort thanks to the **Smooth-technology**. This wear-resistant, patented layer guarantees a smooth, durable and silent operation of the zip in the side guiding channels.

## 7. Vast collection of fabrics and powder coating colours

Panovista (Max) can be perfectly aligned with the building's architecture through the wide range of fabrics and powder coating colours.

## Choice of two different versions

Depending on requirements and expectations, there is a choice of two different Panovista versions. Both products lend themselves perfectly to glass-on-glass corner windows. The difference is in the corner connection. A Panovista has an opening between the two fabric sections. Thanks to the larger head box, Panovista Max integrates an aesthetic zip at the corner. The corner is therefore fully closed, ensuring improved wind resistance up to 90 km/h. The larger head box also allows for larger dimensions. Since the corner is fully closed, the Panovista Max is insect-proof.





anovista®

Panovista® Max

## **PANOVISTA®**





-Fabric set removable on the bottom side





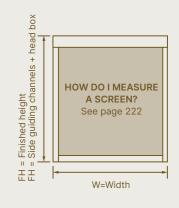




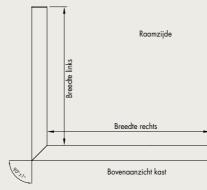
TECHNOLOGY TECHNOLOGY		
Design		
Head box dimensions (HxD)	150 mm x 110 mm	
Head box extension	-	
Square	~	
Retractable bottom bar	~	
Recessed fabric tube	~	
Base plate side guiding channel	At an angle of 0° or 5°	
Wind resistance		
Wind classification EN13561:2004	-	
Wind tunnel test report	WTT14-001	
Guaranteed wind resistance	Up to 37 km/h in closed position	
Control		
Detecto Renson motor Safety First (without obstacle detection)	~	
Somfy mechanic motor	~	
Somfy IO radio-controlled motor	~	
Certificates		
Declaration of Performance (DoP)	CAP-2015SC00004	

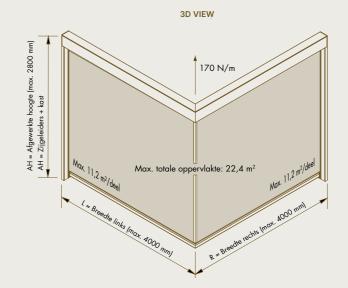
Dimensions					
Panovista					
	NATE AND ADDRESS OF THE PARTY O	650 mm section (width) without motor			
	Min. width	800 mm section (width) with motor			
Fibre glass fabric	Max. width	4000 mm per section			
Sergé / Natté / Privacy	Max. height	2800 mm			
	Max. surface area	11.2 m <sup>2</sup> per section			
	Max. Surface area	22.4 m² total			
Panovista Coupled with Fixscreen 100 Slim IM 7A					
	Min. width Panovista	650 mm section (width) without motor			
	Min. width Panovista	800 mm section (width) with motor			
	Min. width Fixscreen 100 Slim IM 7A	900 mm			
Fibre glass fabric Sergé / Natté / Privacy	Max. width Panovista	4000 mm per section			
	Max. width Fixscreen 100 Slim IM 7A	4500 mm			
	Total coupled width	6000 mm			
	Max. height	2800 mm			

- Coupling is only possible with the Fixscreen 100 Slim IM 7A
- A wind sensor is mandatory
   Only applicable on outer corner
- The necessary bearing strengthof the construction is 170 N/m head box Installation training is mandatory for the installer

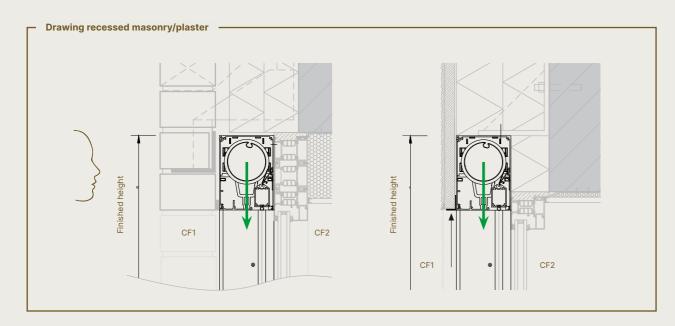


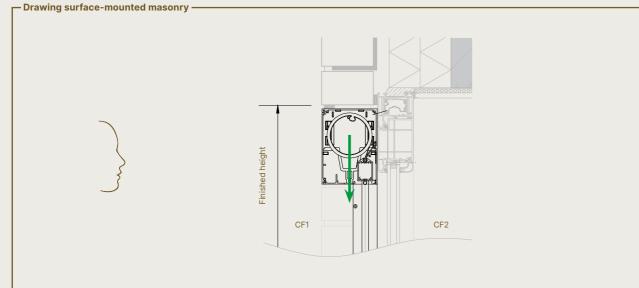






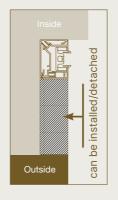




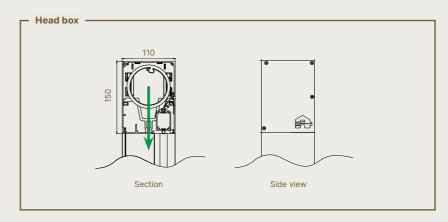


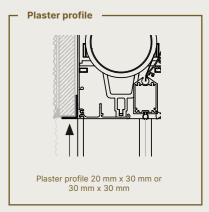
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed

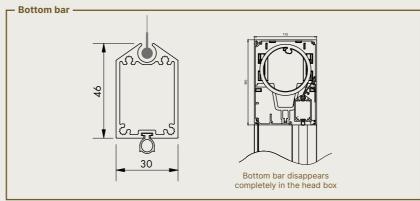


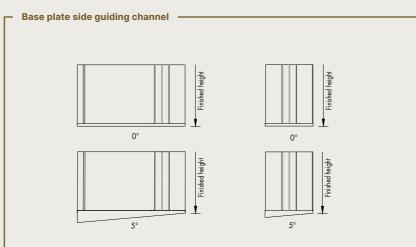


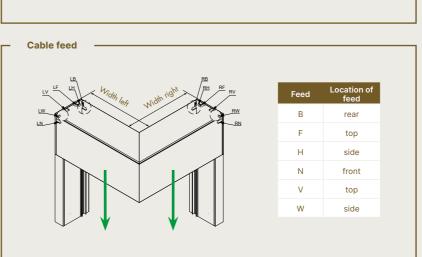
Note: When choosing the narrow side guiding channel G, the customer must foresee something detachable under the head box in order to be able to disassemble the fabric set underneath (H = min. 680 mm).

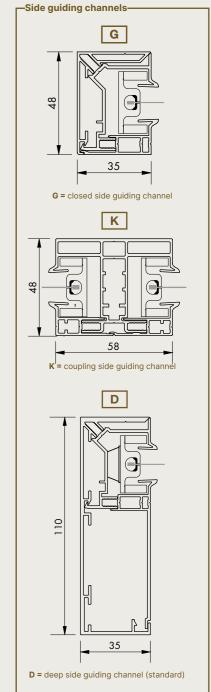










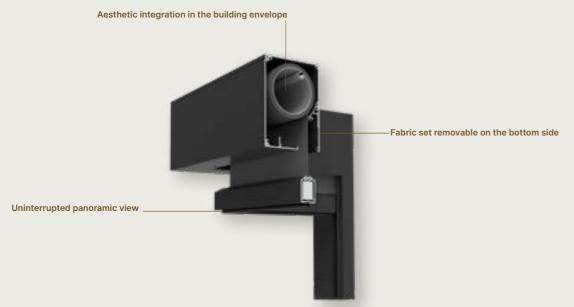






# PANOVISTA® MAX











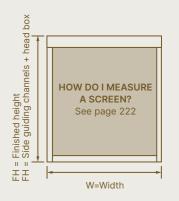


Design		
Head box dimensions (HxD)	150 mm x 155 mm	
Head box extension	-	
Square	✓	
Bottom bar partially retractable	✓	
Recessed fabric tube	✓	
Base plate side guiding channel	At an angle of 0° or 5°	
Wind resistance		
Wind classification EN13561:2004	-	
Wind tunnel test report	WTT15-001	
Guaranteed wind resistance	Up to 90 km/h in closed position	
Control		
Detecto Renson motor Safety First	-	
Somfy mechanic motor	✓	
Somfy IO radio-controlled motor	<b>~</b>	
Certificates		
Declaration of Performance (DoP)	CAP-2015SC00004	

Dimensions			
Panovista Max			
		650 mm section (width) without motor	
	Min. width	850 mm section (width) with motor	
	Max. width	6000 mm per section	
Fibre glass fabric Sergé / Natté / Privacy	Max. width	12,000 mm total	
ocige / Natte / Filvacy	Max. height	3400 mm	
	Many surfaces area	20.4 m <sup>2</sup> per section	
	Max. surface area	30 m² total	

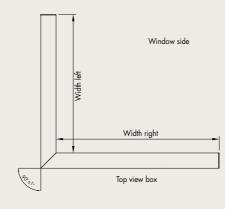
#### NOTE

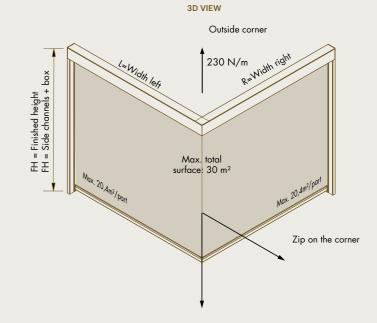
- Only applicable on outer corner
- Joining is not possible
- A wind sensor is mandatory
- Always secure head box and bracket to upper construction/structure. The necessary load-bearing capacity of the structure at the corner brace is 230 N/m per metre head box
- Installation training is mandatory for the installer
- Mandatory annual maintenance



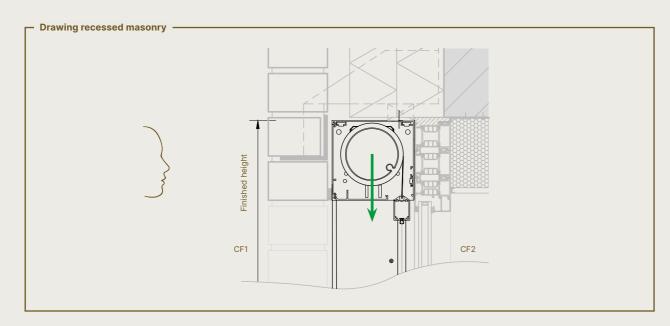
Zip colours		
Ref.	Colour	
02	White	
20	Linen	
32	Beige	
07	Pearl grey	
31	Gray-green	
01	Gray	
06	Bronze	
30	Charcoal	

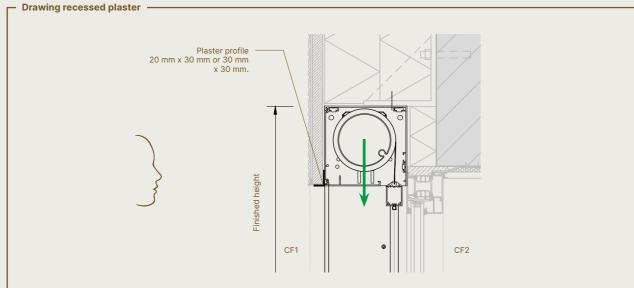
#### TOP VIEW HEAD BOX



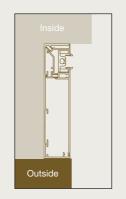


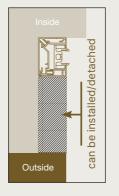




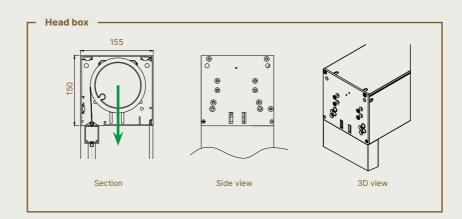


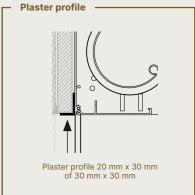
Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed





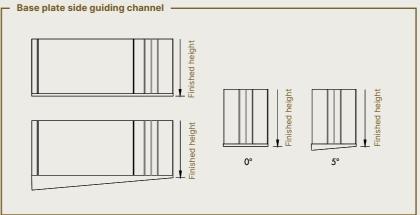
Note: When choosing the narrow side guiding channel G, the customer must foresee something detachable under the head box in order to be able to disassemble the fabric set underneath (H = min. 680 mm).

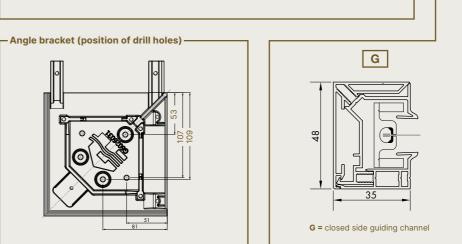


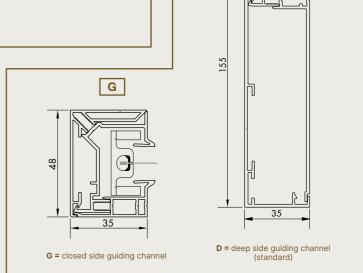


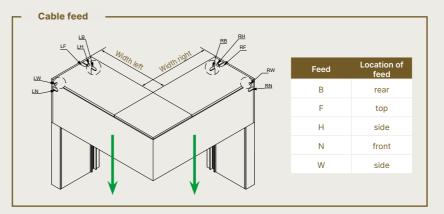
D

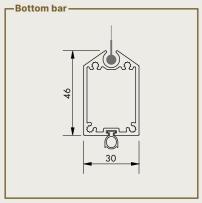
Side guiding channels-









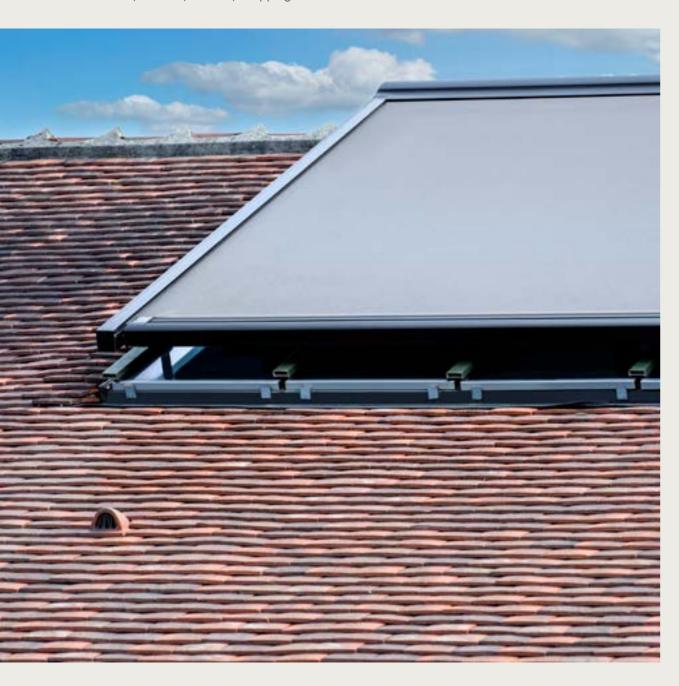


Viewing direction determines choice of left or right cable feed direction in which fabric set should be removed



# HORIZONTAL FABRIC SUN PROTECTION

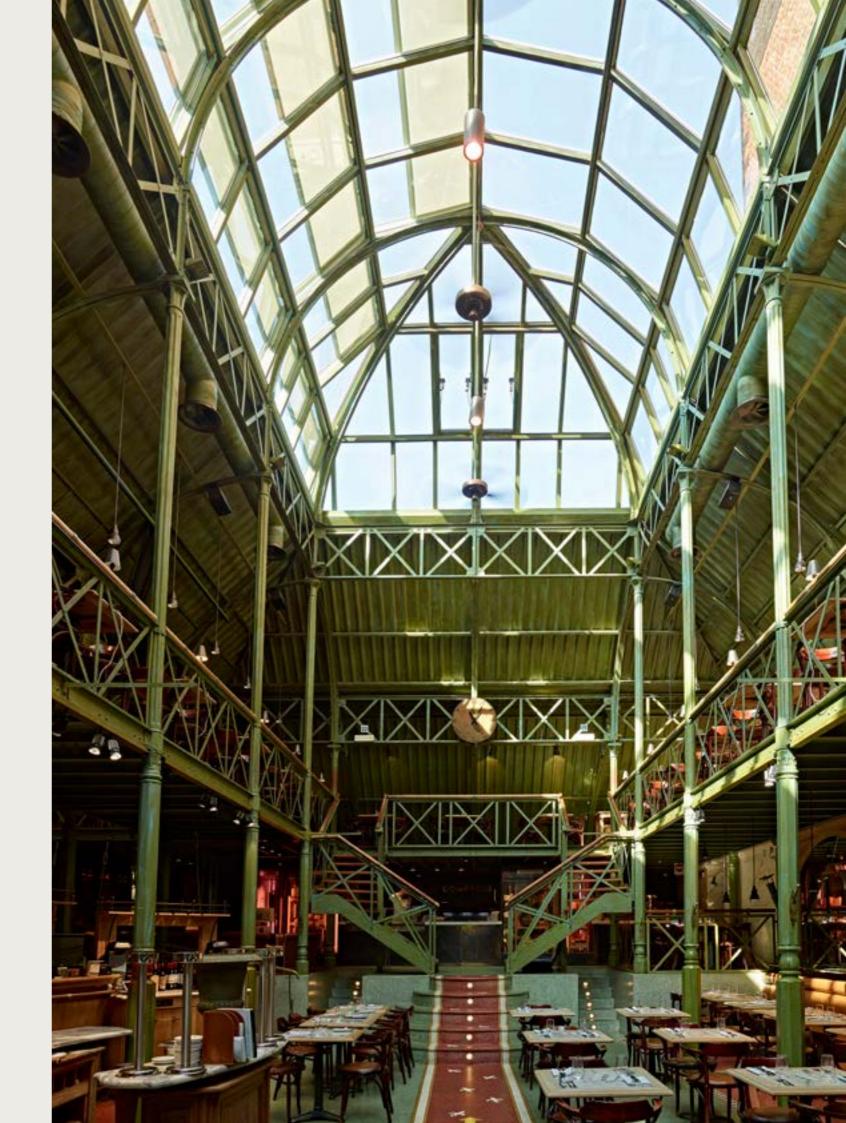
Horizontal fabric sun protection reflects the heat for skylights, verandas, etc. Surface areas up to maximum 30 m² are perfectly possible. Both windproof and non-windproof solutions are possible. Horizontal or angled glazing is also extremely suitable for your home, hospitals, nursing homes, offices, schools, atriums, shopping centres...





# TOPFIX® (MAX)





# TOPFIX® (VMS)

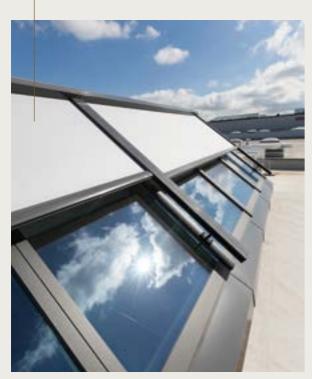
The Topfix (VMS) is a zenithal, windproof fabric sun protection. Windproofing is achieved by combining a revolutionary tensioning technique with the renowned Fixscreen-technology. The offers unrivalled fabric tension. Flapping and torn fabrics are a thing of the past, even with extreme wind gusts up to 120 km/h.

Topfix VMS is an recognised solution (patented technology) and was specially developed for the Velux® Modular Skylights modules. The Topfix VMS can be fitted both above the fixed and movable modules, thanks to special mounting feet that allow perfect installation.



#### Multi-purpose

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



#### Various installation options

Directly on window or with mounting feet. Top, bottom or side-mounted head box.



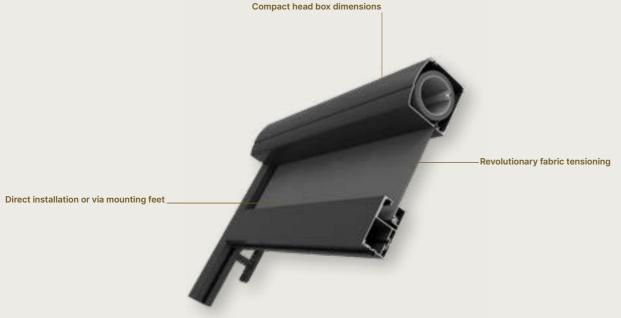
# Compact head box design Vast collection of fabrics and powder coating colours Perfect alignment with architecture home **Durable inner rail equipped with Smooth-technology** The patented, co-extruded, wear-resistant top layer in our HPVC inner rail ensures a smooth, durable and soundless guiding of the fabric.

#### Fixscreen®-technology guarantees high resistance

High wind guarantee up to 120 km/h, thanks to the use of symmetrical zips.

# **TOPFIX®**











Design		
Head box dimensions (HxD)	105 mm x 100 mm	
Head box extension	-	
Retractable bottom bar	-	
Base plate side guiding channel	-	
Wind resistance		
Wind classification EN13561:2004	3	
Wind tunnel test report	N° EAR0852	
Guaranteed wind resistance	Up to 120 km/h in closed position	
Control		
Detecto Renson motor Safety First	-	
Rensonmotor, mechanical 24V	✓	
Somfy mechanic motor	<b>✓</b>	
Somfy IO radio-controlled motor	✓	
Certificates		
Declaration of Performance (DoP)	DOP-201409 - F003	



#### Linked screens

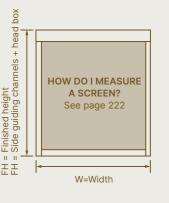
Possible dimensions per section, per fabric type according to 'single screen' table The max total area is  $24 \text{ m}^2$ , of which 1 section is max  $12 \text{ m}^2$ . Required intermediate dimension (expansion): 1 mm per 1000 mm width

#### NOTE

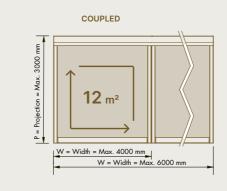
- In the case of direct window installation, deflection of the bottom bar must be taken into account.
- If the Topfix is installed across several glass sections, it is strongly recommended to use mounting feet in order to avoid contact between the bottom bar and the window profile.

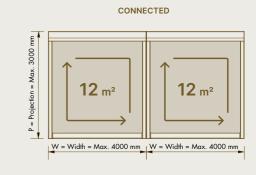
#### Fabrics:

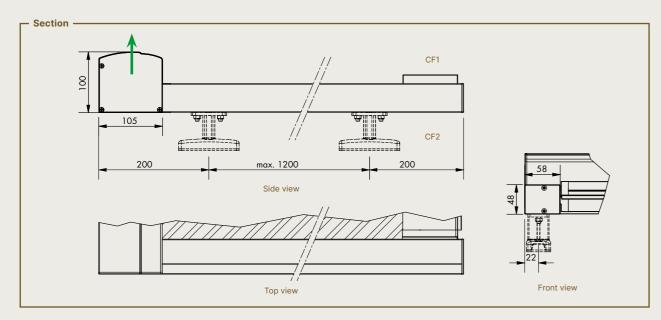
- Scope of application for fabric depends on the incline. See separate table 'Inclination angle fabrics for horizontal fabric sun protection' on page 184
- In the case of greater widths, there is a risk of the fabric dragging against the glass surface

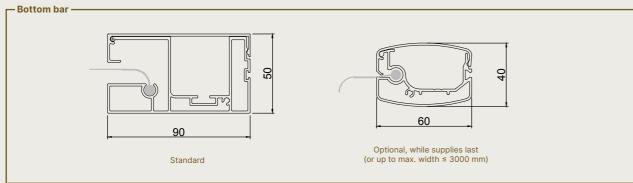


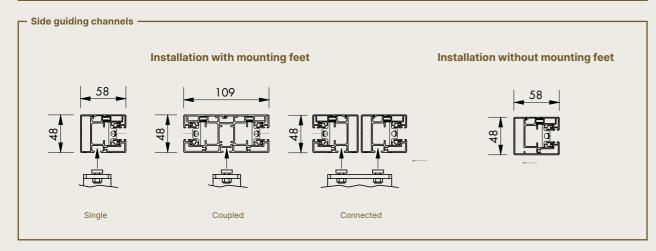




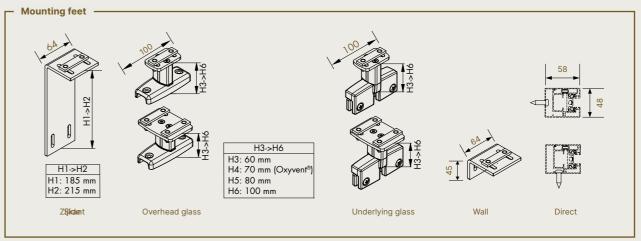


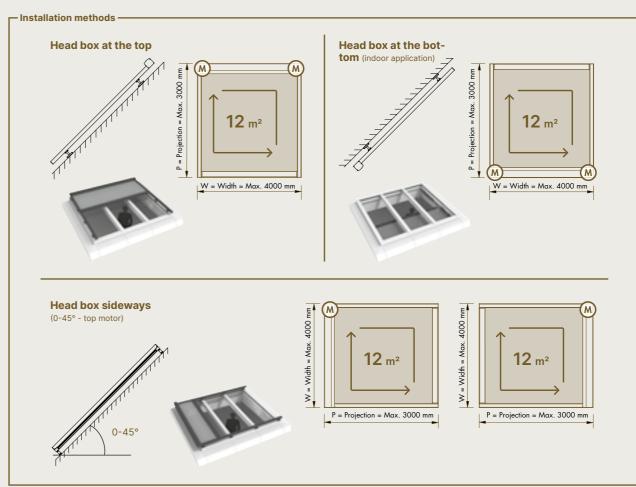


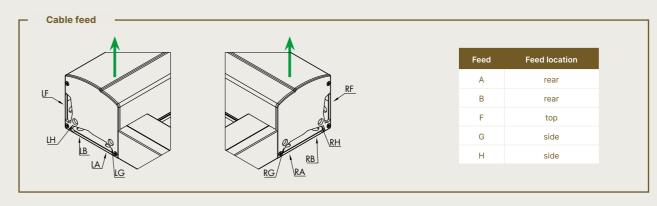




View your Topfix from the perspective from which you remove the fabric set (———). This determines the left or right cable feed option choice.







# TOPFIX® VMS





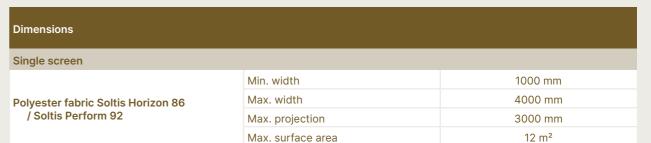








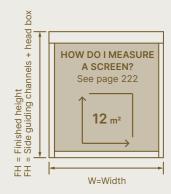
TECHNOLOGY TECHNOLOGY		
Design		
Head box dimensions (HxD)	105 mm x 100 mm	
Head box extension	-	
Retractable bottom bar	-	
Base plate side guiding channel	-	
Wind resistance		
Wind classification EN13561:2004	3	
Wind tunnel test report	N° EAR0852	
Guaranteed wind resistance	Up to 120 km/h with mounting bases 80 mm Up to 80 km/h with mounting bases 160 mm	
Control		
Detecto Renson motor Safety First	-	
Rensonmotor, mechanical 24V	✓ (obligatory for smoke extraction)	
Somfy IO motor	<b>~</b>	
Becker SMI motor	✓	
Certificates		
Declaration of Performance (DoP)	DOP-201409 - F003	



- Topfix VMS mounting bases can only be installed on fixed Velux modules, but opening modules may be present between the fixed modules
- For all requirements and preconditions to ensure correct installation on Velux windows: see product specification file
- The necessary sensors or programming within your building management system must be provided
- Installation training is mandatory for the installer

#### Options:

- Toolkit case optionally available
- Setting cable for Becker SMI and Rensonmotor (24V) optionally available



### TIP from VELUX® - Powder coating colours:

If you want to order the Topfix VMS in the same colour as the exterior colour of the VELUX® Modular Skylight. Renson reference: Akzo, YW359F If you want to order the Topfix VMS in the same colour as the interior colour of the VELUX® Modular Skylight. Renson reference: Axalta, AE70019100125, RAL9010





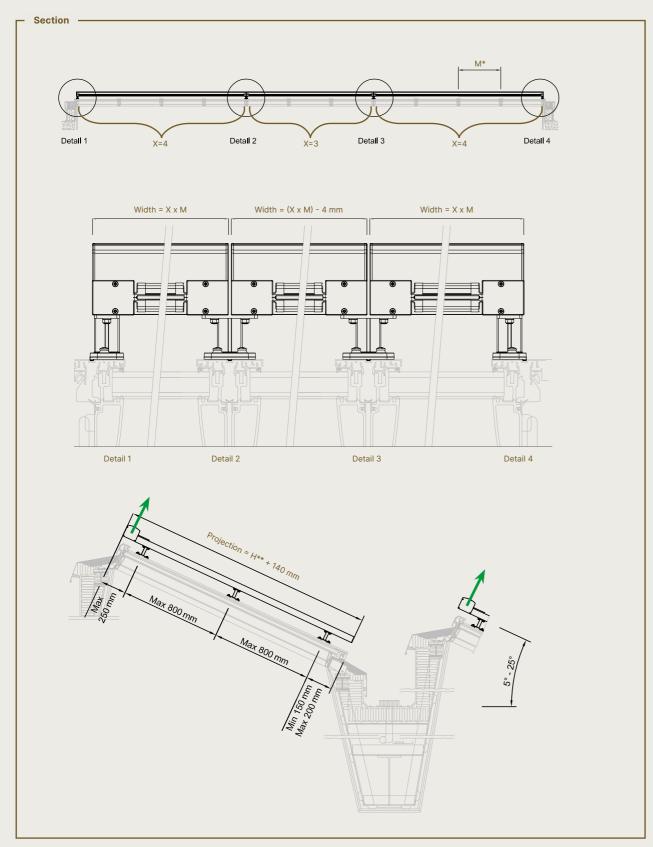
Exterior colour

Interior colour

TIP from VELUX® - Fabric colours:

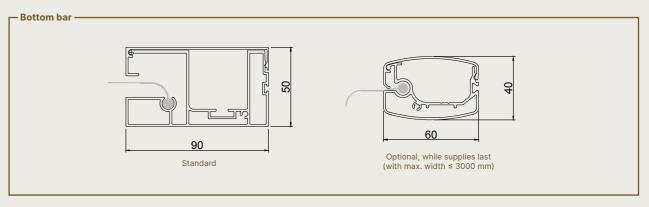
S86 - 2044	
S92 - 2044	

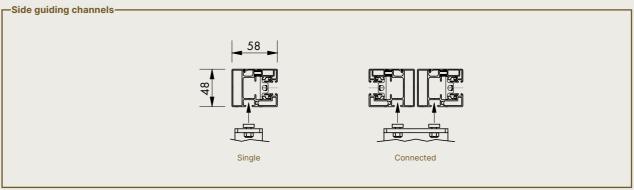


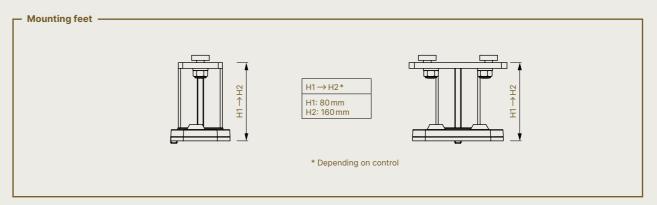


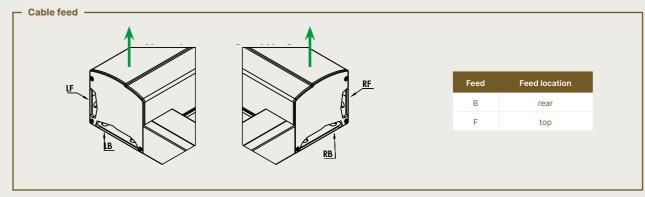
- \* M is the width of the underlying VMS module \*\* H is the projection of the underlying VMS module

View your Topfix from the perspective from which you remove the fabric set (<----). This determines the left or right cable feed option choice.



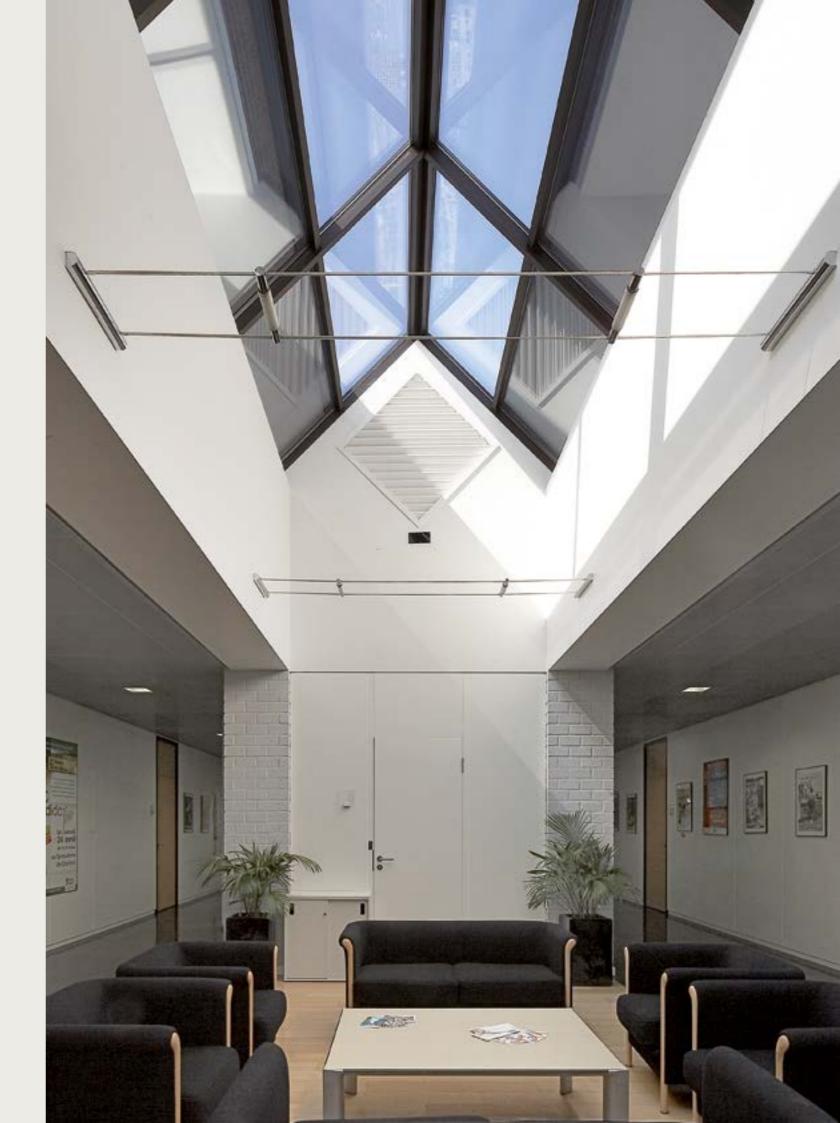






# TOPFIX® MAX (F)





# TOPFIX® MAX (F)

This horizontal sun protection features a new revolutionary tensioning technique that can handle large surface areas. This integrated tensioning technique achieves unrivalled fabric tension. Flapping and torn fabric are a thing of the past. Topfix Max reflects the heat for skylights, verandas, etc. In combination with a blackout fabric, complete blackout can be achieved in indoor and outdoor applications – and this up to 30 m². Topfix Max Freestanding can be installed in open structures. This provides room for numerous new installation options that contribute to the Renson® Outdoor Concept.

#### 1. MULTI-PURPOSE

The Topfix Max range can be used everywhere, in private homes or projects such as hospitals, offices, schools... It can also be applied to all types of windows.

#### 2. VARIOUS INSTALLATION OPTIONS

There is a solution for every specific application. The Topfix Max can be installed directly on the window or using different types of mounting bases. Topfix Max is also suitable for both indoor and outdoor sun protection. Additionally, the head box can be installed at the top or bottom.

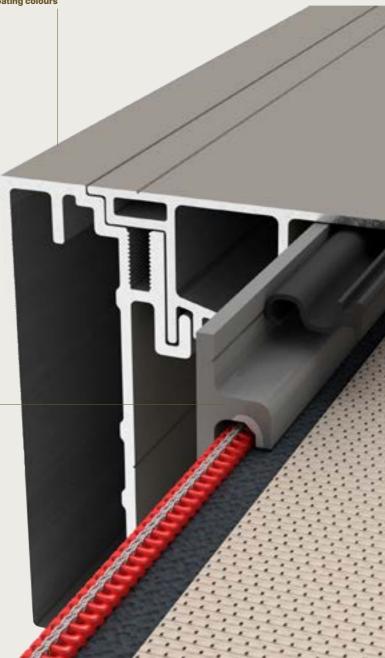
#### 3. LARGE SURFACE AREAS

Thanks to its integrated tensioning technology, Topfix Max (F) is the first windproof fabric sun protection that can handle extremely large surface areas up to 30 m<sup>2</sup>

#### With integrated water drainage (Topfix Max F)







#### **Durable inner rail equipped with Smooth-technology**

The patented, co-extruded, wear-resistant top layer in our HPVC inner rail ensures a smooth, durable and soundless guiding of the fabric.



#### Fixscreen-technology guarantees high wind resistance

High wind guarantee up to 120 km/h, thanks to the use of symmetrical zips.



♣ RENSON®

# **TOPFIX® MAX**











IECHNOLOGY IECHNOLOGY		
Design		
Head box dimensions (HxD)	260 mm x 202 mm	
Head box extension	-	
Retractable bottom bar	-	
Base plate side guiding channel	-	
Wind resistance		
Wind classification EN13561:2004	3	
Wind tunnel test report	-	
Guaranteed wind resistance	Up to 120 km/h in closed position	
Control		
Detecto Renson motor Safety First	-	
Somfy mechanic motor	<b>~</b>	
Somfy IO radio-controlled motor	~	
Wind resistance		
Declaration of Performance (DoP)	DOP-201409 - F003	

#### Dimensions

#### Single screen

Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. width	1225 mm	
	Max. width	5000 mm	6000 mm
Blackout polyester fabric Soltis Opaque B92	Max. projection	6000 mm	5000 mm
	Max. surface area	30 m²	

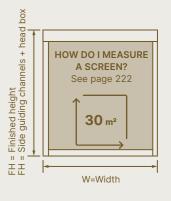
#### Linked screens

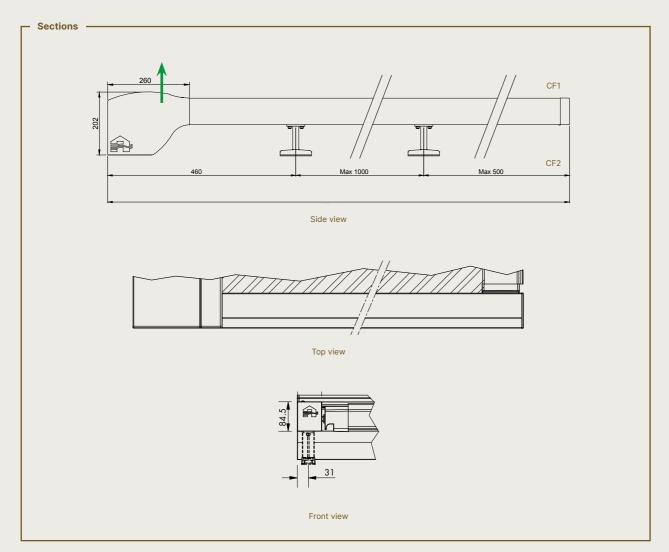
Possible dimensions per section, per fabric type according to 'single screen' table The max total area is 60 m², of which 1 section is max 30 m<sup>2</sup>. Required intermediate dimension (expansion): 1 mm per 1000 mm width

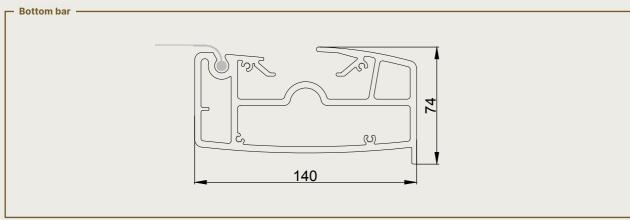
- Head box must always be supported.
- It is recommended that at least two people install the product. Weight: ± 25 to 30 kg/rm.
- Depending on the inclination angle (0°-90° in case the head box is positioned at the bottom), an external support bracket is supplied to
- prevent the head box from sliding out of the side guiding channels.

   Depending on the inclination angle (45°-90° in case the head box is positioned at the top), an internal support bracket is supplied to prevent the head box from sliding out of the fabric set.

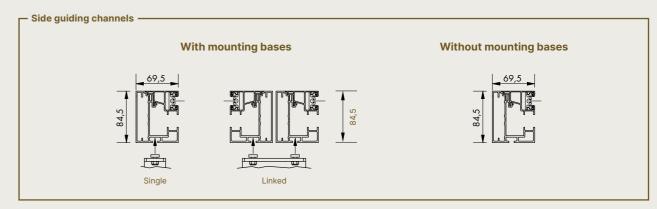
- Horizontal sun protection ≠ protection against rain
- Scope of application for fabric depends on the incline. See separate table 'Inclination angle fabrics for horizontal fabric sun protection' on

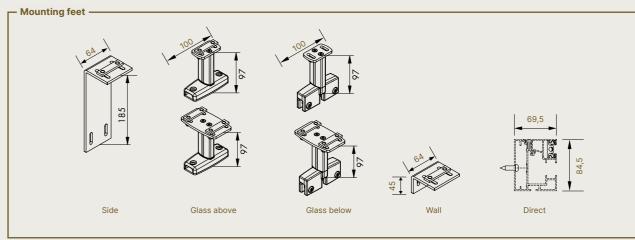


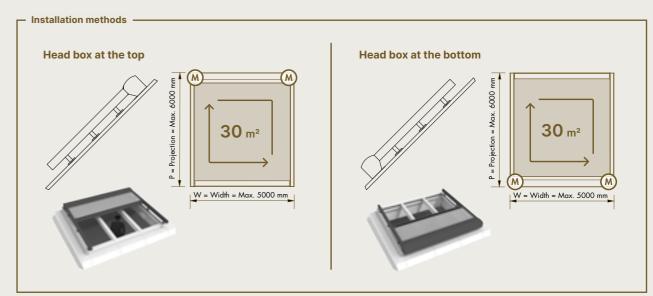


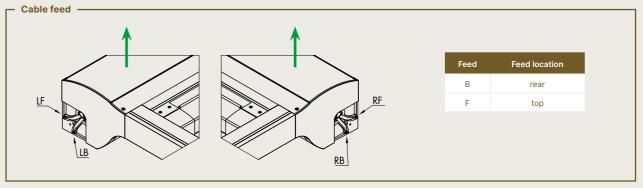


View your Topfix Max from the perspective from which you remove the fabric set (<----). This determines the left or right cable feed option choice.









# TOPFIX® MAX FREESTANDING











Design		
Head box dimensions (HxD)	260 mm x 202 mm	
Head box extension	-	
Retractable bottom bar	-	
Base plate side guiding channel	-	
Wind resistance		
Wind classification EN13561:2004	3	
Wind tunnel test report	-	
Guaranteed wind resistance	Up to 120 km/h in closed position	
Control		
Detecto Renson motor Safety First	-	
Somfy mechanic motor	-	
Somfy IO radio-controlled motor	<b>~</b>	
Certificates		
Declaration of Performance (DoP)	DOP-201409 - F003	

#### Dimensions

#### Single screen

Polyester fabric Soltis Horizon 86 / Soltis Perform 92	Min. width	1225 mm	
	Max. width	5000 mm	6000 mm
Blackout polyester fabric	Max. projection	6000 mm	5000 mm
Soltis Proof W96	Max. surface area	30	m²

#### Linked screens

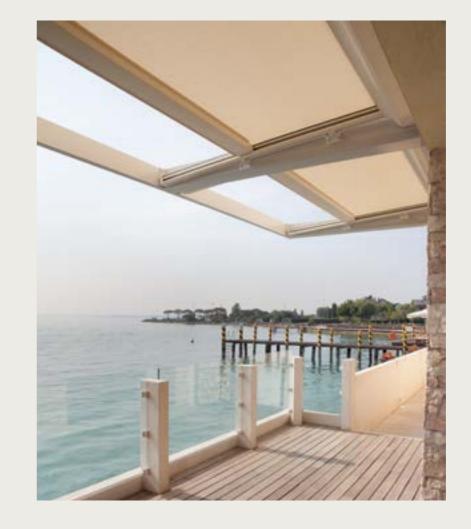
Possible dimensions per section, per fabric type according to 'single screen' table The max total area is 60 m², of which 1 section is max 30 m². Required intermediate dimension (expansion): 1 mm per 1000 mm width

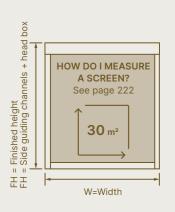
#### NOTE

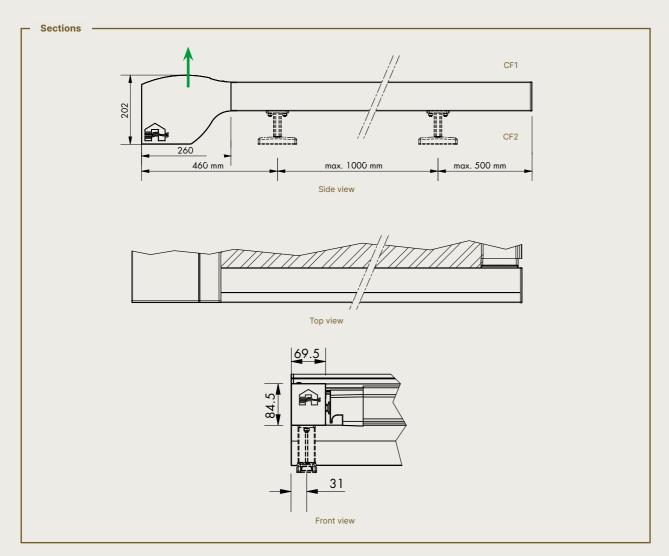
- Head box must always be supported.
- It is recommended that at least two people install the product. Weight: ± 25 to 30 kg/rm.

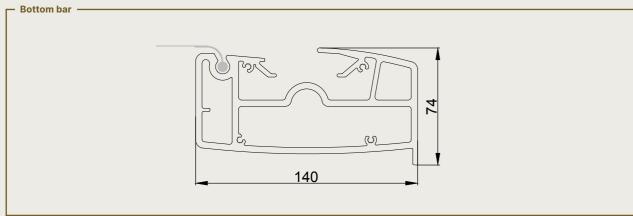
#### Fabrics

- Horizontal sun protection ≠ protection against rain
  - Scope of application for fabric depends on the incline. See separate table 'Inclination angle fabrics for horizontal fabric sun protection' on page 184

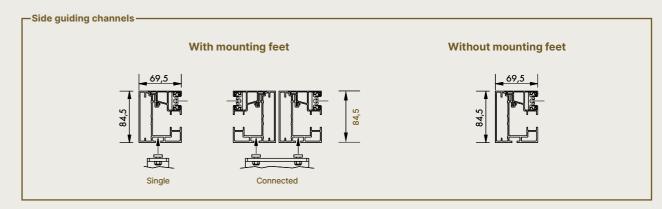


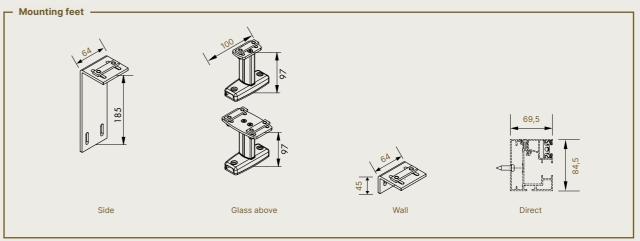


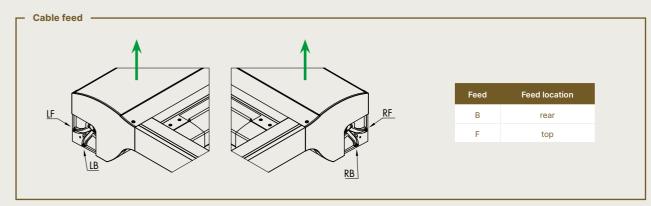




View your Topfix Max F from the perspective from which you remove the fabric set ( \( \). This determines the left or right cable feed option choice.







# **VEGASCREEN®**



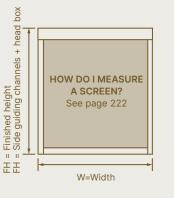


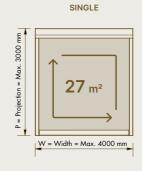
Design		
Head box dimensions (HxD)	230 mm x 140 mm	
Head box extension	-	
Retractable bottom bar	-	
Base plate side guiding channel	-	
Fabric tube with click-profile	~	
Wind resistance		
Wind classification EN13561:2004	-	
Wind tunnel test report	-	
Guaranteed wind resistance	-	
Control		
Detecto Renson motor Safety First	-	
Somfy mechanic motor	<b>~</b>	
Somfy IO radio-controlled motor	~	
Certificates		
Declaration of Performance (DoP)	DOP-201409 - F003	

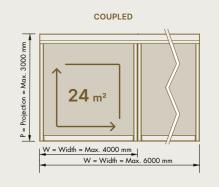
Dimensions		
Single screen		
Polyester fabric Soltis Horizon 86	Min. width	900 mm
/ Soltis Perform 92	Max. width	4500 mm
Blackout polyester fabric Soltis Soltis Opaque B92	Max. projection	6000 mm
	Max. surface area	27 m <sup>2</sup> /single section
Coupled screen		
	Min. width	4001 mm
Idem 'single screen' 2-part (1 motor)	Max. overall width	8000 mm
	Max. section width	4000 mm
	Max. projection	6000 mm
	Max. surface area	24 m <sup>2</sup> /coupled section

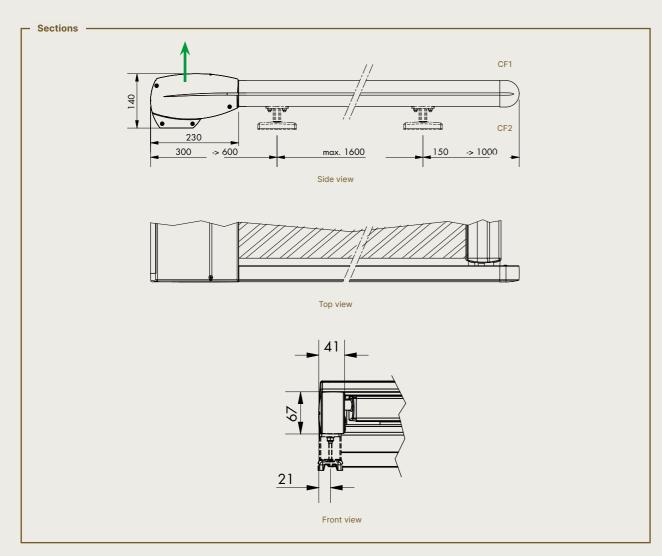
Possible dimensions per section, per fabric type according to 'single screen' table The max total surface area is 54 m², of which 1 section is max 27 m<sup>2</sup>. Required intermediate dimension (expansion): 1 mm per 1000 mm width

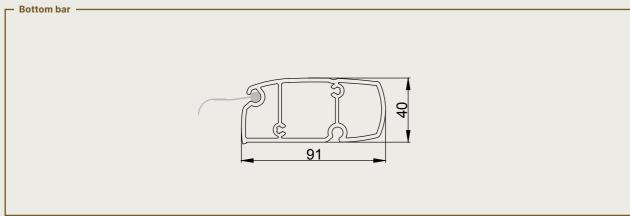
- From 3000 mm projection, one additional supporting roller from 5000 mm projection, two additional supporting
- The fabric tube is fitted with a click-profile for easy fabric replacement (see page 23)Fabrics:
- Horizontal sun protection does not offer any protection against rain
   Scope of application for fabric depends on the incline. See separate table 'Inclination angle fabrics for horizontal fabric sun protection' on page 184
- Head box cannot be placed upside down





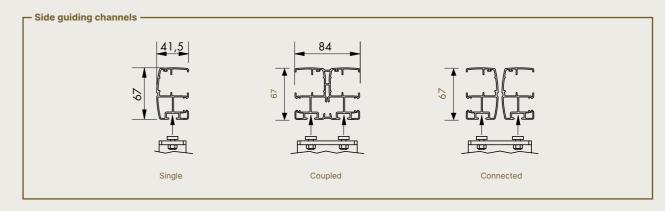


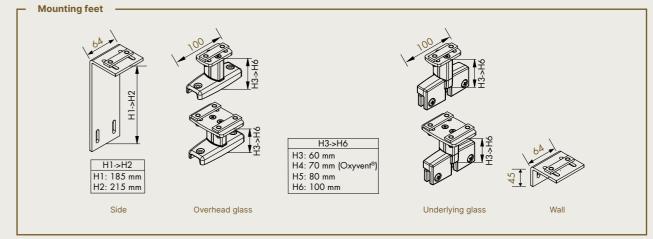




View your Vegascreen from the perspective from which you remove the fabric set (——).

This determines the left or right cable feed option choice.







# **FABRIC RANGE**

How do I choose a fabric? 182

### Fabric range

Fibre glass fabric	191
Polyester fabric Soltis	196
Tuffscreen	20
Crystal fabric	20
<b>Customised print</b>	20

# HOW DO I CHOOSE A FABRIC?

In addition to their functional role, blocking the sun, screen fabrics also have a decorative aspect. This ensures that they align seamlessly with the home's architecture. In addition, all fabrics have an exceptionally long lifespan and keep insects out. We distinguish fabrics based on transparency and light transmission, with a wide range of secondary options. Thanks to their specific characteristics and extensive colour palette, there is a suitable fabric type for every application.



Screen selector
Try our digital & interactive
screen selector online

What is the application of the screen?

A particular fabric sun protection chosen depending on the application. Not all fabrics can be used in all products, so this can already be a first step in selecting the desired fabric. For example, we recommend fibre glass fabrics for the Fixscreen, while polyester fabrics are chosen for a Topfix.

		1	Transparent sur	n protection fabr	ic			nsparent sun tection fabric	Insect-proof fabric	Blacko	ut fabric	
		Fibre glass fabric*		Polyester fabric			Pol	lyester fabric		Fibre glass fabric	Polyester fabric	
	Sergé	Natté	Privacy	Soltis <sup>®</sup> Veozip	Soltis <sup>®</sup> Horizon 86	Soltis <sup>®</sup> Perform 92	Solt	tis° Proof W96	Tuffscreen	Satiné 21154	Soltis <sup>®</sup> Opaque B92	
Fixscreen <sup>®</sup>	<b>~</b>	~	~	~	~	~		-	~	~	~	Fixscreen®
Fixscreen® Freestanding	~	~	~	~	-	-		-	~	-	-	Fixscreen® F
Fixscreen® Minimal	~	~	~	-	-	-		-	~	~	-	Fixscreen® Minima
Fixscreen® Minimal Freestanding	~	~	~	-	-	-		-	~	-	-	Fixscreen® Minimal F
Fixvent® / Fixscreen® Mono AK	~	~	~	-	~	~		-	~	<b>~</b>	~	Fixvent®/Fixscreen® Mono AK/UT
Panovista® (Max)	~	~	~	-	-	-		-	-	-	-	Panovista® (Max)
Topfix <sup>®</sup>	-	-	-	-	~	~		-	-	-	~	Topfix <sup>®</sup>
Topfix® VMS	-	-	-	-	~	~		-	-	-	-	Topfix® VMS
Topfix <sup>®</sup> Max	-	-	-	-	~	~		-	-	-	~	Topfix <sup>®</sup> Max
Topfix® Max Freestanding	-	-	-	-	~	~		~	-	-	-	Topfix <sup>®</sup> Max F
Vegascreen <sup>®</sup>	-	-	-	-	~	~		-	-	-	~	Vegascreen <sup>®</sup>

<sup>\*</sup> Option crystal window in the full width on page 202

#### NOTE

For the limitations in dimensions (see product pages) and the table for inclination angle fabrics (see page 184).



- A fabric in a dark colour offers the best view through to the outside?
- A fabric in a lighter colour reflects more sunrays than one in a darker colour?
- A fully blackout fabric is the best choice for your bedrooms?
- Fibre glass & polyester fabrics can be printed for extra personalisation?
- An insect mesh repels insects but offers little sun protection?

# INCLINATION ANGLE FABRICS HORIZONTAL SUN PROTECTION

				Polyester fabric	:		Fibre glass
			Soltis <sup>®</sup> Horizon 86	Soltis® Perform 92	Soltis® Opaque B92	Soltis® Proof W96	
INCLINATION ANGLE*	WIDTH	PROJECTION	Sun	protection (water-	repellent dependi	ing on fabric type)	
Topfix®							
H ≤ 8°	W ≤ 4000 mm	U ≤ 3000 mm	~	-	-	-	-
	W ≤ 4000 mm	U ≤ 1500 mm		<b>✓</b>	<b>~</b>	-	_
	W ≤ 1250 mm	0 = 1300 11111		<b>√</b>		_	_
8° < H ≤ 20°	1250 < W ≤ 4000 mm	1500 < U ≤ 3000 mm	~	~	-	-	-
H > 20°	W ≤ 4000 mm	U ≤ 3000 mm		<b>✓</b>	<b>~</b>	_	_
Topfix® VMS	W 3 4000 IIIIII	0 2 3000 11111	·	v	Ť		
H ≤ 8°	W ≤ 4000 mm	U ≤ 3000 mm	~				
H > 8°	W ≤ 4000 mm	U ≤ 3000 mm		<b>✓</b>			
Topfix® Max	W ≤ 4000 IIIIII	0 ≤ 3000 mm	v	v			
H ≤ 8°	W ≤ 5000 mm	U ≤ 6000 mm	~				
11-0	W ≤ 4000 mm	0 = 0000 11111		<b>✓</b>			
8° < H ≤ 15°	4000 < W ≤ 5000 mm	4000 < U ≤ 6000 mm	~	v	v		
	W ≤ 5000 mm	U ≤ 6000 mm	~	~	<b>~</b>		
H > 15°	W ≤ 6000 mm	U ≤ 5000 mm					
Topfix® Max F		0 - 0000 111111					
H ≤ 6°	W ≤ 5000 mm	U ≤ 6000 mm	~				
	W ≤ 2000 mm	U ≤ 5000 mm		~			
6° < H ≤ 7°	W ≤ 5000 mm	U ≤ 6000 mm	~				
	W ≤ 3000 mm	U ≤ 5000 mm	~	~			
7° < H ≤ 8°	W ≤ 5000 mm	U ≤ 6000 mm	~				
	W ≤ 2000 mm	U ≤ 5000 mm	~	~		~	
00 411 400	W ≤ 4000 mm		~	~			
8° < H ≤ 9°	4000 < W ≤ 5000 mm	U ≤ 6000 mm	~				
	W ≤ 3000 mm	U ≤ 5000 mm	~	~		~	
00 111 1100	W ≤ 4000 mm		~	~			
9° < H ≤ 10°	4000 < W ≤ 5000 mm	U ≤ 6000 mm	~				
	W ≤ 3000 mm	U ≤ 5000 mm	~	~		~	
400 411 4440	W ≤ 4000 mm		~	~		~	
10° < H ≤ 11°	4000 < W ≤ 5000 mm	U ≤ 6000 mm	~				
	W ≤ 4000 mm		~	<b>✓</b>		~	
11° < H ≤ 13°	4000 < W ≤ 5000 mm	U ≤ 6000 mm	~			~	
	W ≤ 5000 mm	U ≤ 6000 mm	~			~	
H > 13°	W ≤ 6000 mm	U ≤ 5000 mm	~			~	

2

What requirements must the screen satisfy?

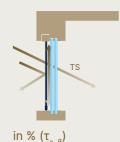
Different fabric types, colours, weaves... everything has an impact or the technical properties of the fabric. That is why it is important to have a clear idea of what requirements the fabric must satisfy. This again depends on both the building type and the application as well as the use of the space. For instance, the thermal value achieved by a fabric, a certain fire-resistance, the influence of visual parameters, etc. can be decisive.

#### 1. TECHNICAL VALUES OF A FABRIC



#### Opening factor (OF)

The larger the opening factor, the greater the light transparency and the better the view through to the inside or outside.



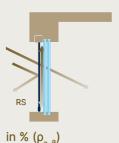
#### **Solar transmittance factor (TS)**

Percentage of incident energy passing through the fabric.



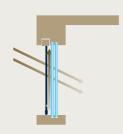
# Light transmittance factor (TV)

The greater the light transmittance factor, the more light comes through the fabric and the higher the light intensity level (lux) in the room.



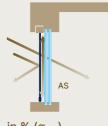
#### Sun reflection factor (RS)

Percentage of incident energy reflected by the fabric.



#### **Shading coefficient (gtot)**

The total percentage of energy that comes inside through a window with sun protection.



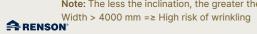
#### Solar absorption factor (AS)

Percentage of incident energy absorbed by the fabric.

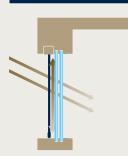


TS + RS + AS = 100% of the incident energy ( $\tau_{\rm e,\,\beta}$  +  $\rho_{\rm e,\,\beta}$  +  $\alpha_{\rm e,\,\beta}$  = 1)





#### 2. THERMAL COMFORT



Solar gain control is expressed by the value of total solar factor. This value is the total percentage of energy that comes inside through a window with sun protection. It therefore reflects how efficient the fabric sun protection is. The goal value of fabric sun protection in combination with type C glazing can be classified according to the table below.

Glazing type C 4/16/4 low-emission double glazing

 $U = 1.2W/m^2K$  $g_{a} = 0.59$ 

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

In addition, the great value is also given in each case in the case of fabric sun protection in combination with type D glazing.

Glazing type D Reflective 4/16/4 low-emission

> double glazing  $U = 1.1W/m^2K$  $g_a = 0.32$

In addition to these values, the reduction factor F is also used. This reduction factor is a measure of the fraction of solar energy left only by the sun protection.

$$F = \frac{g_{to}}{g_g}$$

Ter info: All our fabric sun protections are listed in the EPB database. This database is coupled to the EPB software 3G. This allows the gtot value to be calculated automatically.

#### 3. VISUAL COMFORT

#### A. Visual contact with the outside

The degree to which a person inside (at 1 m from the fully lowered fabric sun protection) can distinguish a person or object on the outer side (at 5 m from the fabric sun protection). Visual contact with outside can be classified from 0 to 4 according to the table below.

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



#### B. Using natural daylight

- Sun shading capacity to reduce the time when artificial lighting is required
- Sun shading capacity to make best use of 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 different areas in the field of vision
- Avoid annoying reflections on screens due to window luminance

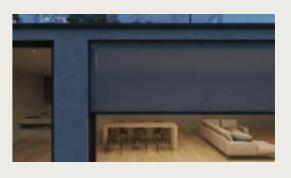
Class*	0	1	2	3	4
Effect	Very little effect	Little effect	Moderate effect	Good effect	Very good effect



#### D. Privacy at night

Capacity of exterior sun protection, when fully closed or lowered, to shield persons from view.

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



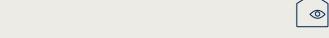
#### Opt for thermal comfort and avoid overheating indoors

- · A dark fabric blocks heat better
- A fabric with a small opening factor blocks heat better





- A light fabric lets more natural daylight inside
- A fabric with a small opening factor:
- Offers more privacy
- Lets less light inside
- Is better against glare



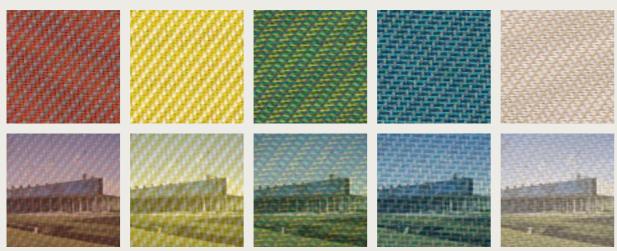
<sup>\*</sup> Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501

<sup>\*</sup> Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501

3

What are the customer's personal preferences?

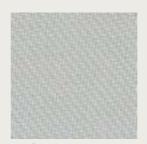
There's no disputing tastes and colours. So it's fortunate that the range of colours and weave patterns is incredibly extensive. The aesthetics of the fabric (colour, weave pattern, confection side, etc.) have an impact on its functionality. The effect will vary slightly each time. Mix and match to find the perfect solution!



Example of the impact of your fabric colour choice on your environment

#### WEAVE PATTERN

The look of a fabric is likely to be an important factor in your choice. Aside from colour, the weave pattern also plays a major role. Multiple options are available in fibre glass fabrics, such as tighter weaves or straight weaves.



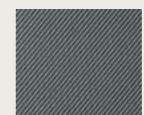


Sergé

Natté

#### CONFECTION SIDE

All fabrics have two sides. Confection side 1 is the top side of the fabric sample in the Renson® fabric sampler. This is how the screen fabric appears from the outside. Confection side 2 is the bottom side of the fabric sample in the Renson® fabric sampler. The confection sides are indicated on all technical drawings.





Confection 1 example

Confection 2 example

#### WELDED SEAM & FABRIC DIRECTION

If both the width and height exceed the size of the fabric set: a welded seam will be visible so that both fabric parts can be Coupled together. The position of this welded seam differs from fabric to fabric and depends on the dimensions of the fabric. The height of the welded seam is always calculated from the lowest point of the framework. Renson® always tries to manufacture your fabric with the least amount of welded seams possible. This means that, per order, we look to see if it is possible to turn the fabrics so that they can be manufactured without any heat-sealed seams.







#### Note!

If the order concerns a follow-up order, then subsequently, it is important that this is indicated. This ensures Renson® can guarantee that the same fabric direction is used as in the first order.

# FIBRE GLASS FABRIC

#### Sergé, Natté, Privacy

Fibre glass fabrics are made of woven glass fibres with a PVC coating and are available in many colours. Fibre glass fabrics keep their shape and are resistant to humidity and heat, rot-proof and colour-fast. They guarantee a perfect view of the outside world while preventing others from looking in during daylight hours.

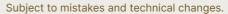
Technical properties	s		
	Sergé	Natté	Privacy
Composition	Gla	ss fibre (42 %) with PVC coating (58	8 %)
Available width	From 1350 mm to 2700 mm Limited selection available up to 3200 mm	2500 mm Limited selection available up to 3200 mm	2700 mm
Fire class	Euroclass NF EN 13501-1 (EU): c-s3 d0 NF P 92-503 (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	approx. 0.55 mm – EN ISO 5084	approx. 0.53 mm – EN ISO 2286 – 3	approx. 0.80 mm – ISO 5084
Weight	approx. 535 g/m² – NF 12127	approx. 560 g/m² – EN ISO 2286 – 2	approx. 620 g/m <sup>2</sup> – 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%

# SERGÉ FIBRE GLASS FABRIC

Colours v	Colours with corresponding RAL colours													
Ref.	RAL Equivalent		AS	RS	TS	TV	g <sub>tot</sub>	ext. D	Thermal comfort C	Visual contact tact with the outside	Using natu- ral daylight	Glare	Privacy at night	
SC0202 (+)	9003	CF1	13.2	65.9	21.0	21.2	0.15	0.10	2	0	2	1	2	
		CF2	12.7	66.3	21.0	21.2	0.15	0.10	_	-	_			
SC2020 (+)	1015	CF1	32.5	52.5	14.9	12.9	0.13	0.09	3	3	2	0	1	
002020 (1)	1010	CF2	32.4	52.7	14.9	12.9	0.13	0.09	Ü	Ŭ	-	Ŭ		
SC4949	9006	CF1	53.0	37.0	10.0	9.0	0.11	0.09	3	1	1	1	2	
304949	9000	CF2	53.0	37.0	10.0	9.0	0.11	0.09	3	'	'	'	2	
SC0707	7038	CF1	51.7	38.3	10.1	8.4	0.11	0.09	3	3	1	1	1	
300707	7036	CF2	50.5	39.4	10.1	8.4	0.11	0.09	3	3	1	1	'	
000101 (+)	7037	CF1	81.3	15.1	3.5	3.6	0.10	0.08	3	2	1	3	2	
SC0101 (+)	/03/	CF2	81.3	15.1	3.5	3.6	0.10	0.08	3	2	1	3	2	
SC1111	7048	CF1 CF2	77.0	18.0	5.0	6.0	0.10	0.09	3	2	1	3	2	
SC5959	7040	CF1	87.1	6.7	6.2	6.2	0.11	0.09			4			
(NEW)	7016	CF2	87.1	6.7	6.2	6.2	0.11	0.09	4	2	1	3	2	
000000 (.)	7004	CF1	91.4	5.0	3.6	3.6	0.10	0.09				_		
SC3030 (+)	7021	CF2	91.6	4.8	3.6	3.6	0.10	0.09	3	2	1	3	2	
SC6060		CF1	92.0	4.0	4.0	5.9	0.09	0.07						
(NEW)	9005	CF2	92.0	4.0	4.0	5.9	0.09	0.07	3	2	1	3	2	



Other col	ours											
Ref.		AS	RS	TS	TV	g <sub>tot</sub> C	ext. D	Thermal comfort C	Visual contact with the outside	Using natu- ral daylight	Glare	Privacy at night
SCM36 (+)	CF1	27.7	59.8	12.4	11.6 11.6	0.11	0.08	3	1	1	1	2
	CF2 CF1	23.4 26.4	64.2 58.2	12.4 15.5	13.7	0.10	0.07					
SC2002 (+)	CF1	28.1	56.4	15.5	13.7	0.13	0.09	3	1	2	1	2
	CF2 CF1	48.7	42.6	8.7	7.8	0.13	0.09					
SCM45 (+)	CF2	52.4	38.9	8.7	7.8	0.10	0.08	3	3	1	1	1
	CF1	39.1	49.2	11.7	10.2	0.10	0.08					
SC1002 (+)	CF2	43.6	44.6	11.7	10.2	0.11	0.09	3	1	1	1	2
	CF1	68.8	26.5	4.7	4.5	0.09	0.08	4				
SC0110 (+)	CF2	73.8	21.5	4.7	4.5	0.10	0.08	3	2	1	3	2
	CF1	56.2	37.2	6.7	6.6	0.09	0.08	4	_	_	_	
SC0102 (+)	CF2	66.4	26.9	6.7	6.6	0.10	0.08	3	2	1	3	2
001404 (.)	CF1	63.0	33.2	3.9	3.6	0.08	0.07		0	1	_	
SCM31 (+)	CF2	70.9	25.2	3.9	3.6	0.09	0.08	4	2	1	3	1
SC0207 (+)	CF1	37.4	50.9	11.7	9.9	0.11	0.08	3	1	1	1	2
SC0207 (+)	CF2	41.4	46.9	11.7	9.9	0.11	0.08	3	1	1	ı	2
SC0606	CF1	88.0	8.1	3.9	3.8	0.10	0.09	3	2	1	3	2
300000	CF2	87.7	8.4	3.9	3.8	0.10	0.09	3		'	3	
SC1011 (+)	CF1	87.4	6.5	6.1	6.1	0.09	0.07	4	3	1	1	1
301011 (1)	CF2	87.9	6.0	6.1	6.1	0.09	0.07	7	J	'	'	
SC0130 (+)	CF1	86.5	9.9	3.6	3.6	0.10	0.09	3	2	1	3	2
000100 (1)	CF2	83.8	12.6	3.6	3.6	0.10	0.08		-			-
SC1006 (+)	CF1	73.2	21.1	5.7	5.0	0.10	0.09	3	2	1	3	2
00.000( )	CF2	66.3	28.0	5.7	5.0	0.10	0.08		_			_
SC2050	CF1	70.6	21.1	8.3	7.8	0.12	0.09	3	1	1	1	2
	CF2	59.7	32.0	8.3	7.8	0.11	0.09					
SCM33 (+)	CF1	73.4	23.0	3.6	3.0	0.09	0.08	4	2	1	3	2
,	CF2	76.5	19.8	3.6	3.0	0.09	0.08					
SC0140 (+)	CF1	76.0	18.4	5.6	4.7	0.10	0.09	3	2	1	3	2
/	CF2	77.6	16.8	5.6	4.7	0.11	0.09					



The colours printed here may differ slightly than the actual colours.

Please refer to our fabric swatch for exact colours.

RAL equivalent for orientation • AS: solar absorption factor in % • RS: solar reflection factor in % • TS: solar transmittance factor in % • TV: light transmittance factor in % •  $g_{tot}$  ext. in the case of glazing type C according to NBN EN ISO52022-1 • Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501

CF1 = Confection side 1, top side of fabric sampler • CF2 = Confection side 2, bottom side of fabric sampler



<sup>(+):</sup> Extra fabric width of 3200 mm for a selection of colours.

These colours are based on the latest trends in the interior design, exterior design and architecture world.

Architect	Architects' selection													
Ref.		AS	RS	TS	TV	gtot	ext.	Thermal comfort C	Visual con- tact with the outside	Using natu- ral daylight	Glare	Privacy at night		
						С	D	Ţ 0	Visu tac the c	Using ral d	O	Priv n		
SC3131	CF1 CF2	75.0	17.9	7.1	7.0	0.11	0.09	3	3	1	1	1		
SC3231 (+)	CF1 CF2	70.4 67.6	22.5 25.3	7.1 7.1	6.6 6.6	0.11	0.09	3	3	1	1	1		
SC3232 (+)	CF1 CF2	63.8	27.9	8.3	7.4	0.11	0.09	3	3	1	1	1		
SC3301 (+)	CF1 CF2	74.7 73.3	17.0 18.4	8.3 8.3	8.0	0.12 0.12	0.10 0.10	3	3	1	1	1		
SC3332 (+)	CF2 CF1	67.5	24.7	7.8	7.3	0.12	0.10	3	3	1	1	1		
303332 (+)	CF2	69.7	22.5	7.8	7.3	0.11	0.09	3	3	'	'	'		
SC3333 (+)	CF1 CF2	72.4	20.5	7.1	6.8	0.11	0.09	3	3	1	1	1		



The colours printed here may differ slightly than the actual colours. Please refer to our fabric swatch for exact colours.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: solar transmittance factor in % • TV: light transmittance factor in % • gtot ext. for glazing type C • gtot ext. for glazing type D • Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501

CF1 = Confection side 1, top side of fabric sampler • CF2 = Confection side 2, bottom side of fabric sampler (+): Extra fabric width of 3200 mm for a selection of colours.



# NATTÉ FIBRE GLASS FABRIC

A Natté fibre glass fabric is fabric with a perpendicular weave pattern.

Ref.	AL Equi- valent		AS	RS	TS	TV	g <sub>tot</sub>	ext.	Thermal comfort C	Visual con- tact with the outside	Using natu- ral daylight	Glare	ivacy at night
Kei.	RAL val		AS	K3	13	1 V	С	D	The com	Visual tact	Using ral da	ö	Privacy night
N-0202 (+)	9003	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	34	53	13	11	0.12	0.08	3	1	2	1	2
N-0201 (+)		CF1	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	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 (+)	7021	CF1	91	6	3	3	0.09	0.08	4	2	1	3	2



Subject to mistakes and technical changes.

The colours printed here may differ slightly than the actual colours. Please refer to our fabric swatch for exact colours.

RAL equivalent for orientation • AS: solar absorption factor in % • RS: solar reflection factor in % • TS: solar transmittance factor in % • TV: light transmittance factor in % • gtot ext. for glazing type C • gtot ext. for glazing type D • Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501

CF1 = Confection side 1, top side of fabric sampler • CF2 = Confection side 2, bottom side of fabric sampler

(+): Extra fabric width of 3200 mm for a selection of colours.



### PRIVACY FIBRE GLASS FABRIC

A Privacy (Sergé 1%) fibre glass fabric is a fabric with an openness factor of just 1%. This fabric offers privacy without restricting the view outside.

Ref.	RAL Equivalent		AS	RS	TS	TV	g <sub>tot</sub>	ext. D	Thermal comfort C	Visual con- tact with the outside	Using natu- ral daylight	Glare	Privacy at night
	ш									> - =	ૐ <u>™</u>		т.
P-0202	9003	CF1	15.9	71.3	12.8	12.9	0.09	0.06	4	1	2	1	2
P-2020 (P- 0808)	1015	CF1 CF2	39.9	54.2	5.9	3.7	0.06	0.04	4	2	1	2	2
P-0707	7038	CF1 CF2	60.3	36.9	2.8	2.1	0.05	0.04	4	2	0	3	2
P-0207		CF1	45.9	48.8	5.3	4.3	0.08	0.06	4	2	1	2	2
F-0207		CF2	36.2	58.5	5.5	4.3	0.08	0.00	4	2	'		
P-0101	7037	CF1	80.2	17.4	2.4	2.2	0.06	0.05	4	2	0	3	2
D 0100		CF1	53.0	44.8	2.2	2.0	0.06	0.05	4	2	0	3	2
P-0102		CF2	66.6	31.2	2.2	2.0	0.06	0.05	4	2	U	3	2
P-0606 (P-		CF1	90	8.6	1.4	1.3	0.06	0.05	4	2	0	3	2
1111)		CF2	90	0.0	1.4	1.5	0.00	0.03	4		U	3	
P-0130		CF1	88.3	10.5	1.2	1.2	0.09	0.08	4	2	0	3	2
1 0130		CF2	84.8	14.0	1.2	1.2	0.03	0.00	-		0	,	
P-3030 (P-		CF1	93	5.9	1.1	1.1	0.06	0.05	4	2	0	3	2
1010)		CF2	55	5.5	1.1	1.1	0.00	0.00	7		0		



Subject to mistakes and technical changes.

The colours printed here may differ slightly than the actual colours. Please refer to our fabric swatch for exact colours.

RAL equivalent for orientation • AS: solar absorption factor in % • RS: solar reflection factor in % • TS: solar transmittance factor in % • TV: light transmittance factor in % • gtot ext. for glazing type C • gtot ext. for glazing type D • Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501

CF1 = Confection side 1, top side of fabric sampler • CF2 = Confection side 2, bottom side of fabric sampler

# **BLACKOUT FIBRE GLASS FABRIC**

This fibre glass fabric consists of a standard fibre glass fabric with a blackout PVC coating.

Technical properties	Satiné 21154
Composition	Glass fibre (28%) with PVC (72%)
Available width	2100 mm
Fire class	NF P 92-503 (FR): M1
Lightfastness (ISO2286-3)	Grade 7/8
Thickness (ISO2286-3)	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%

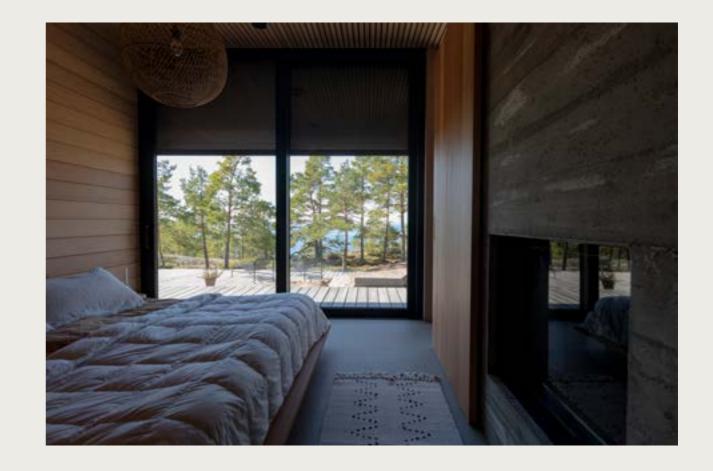
Ref.	RAL Equivalent		AS	RS	TS	TV	g <sub>tot</sub> ex	t. D	Thermal comfort C	Visual con- tact with the outside	Using natu- ral daylight	Glare	Privacy at night
	Щ						J		F 0	t si Si	Usil		Ğ
GVV 0101		CF1	79	21	0	0	0.03	0.02	4	0	0	4	4
GVV 0102		CF1	59	41	0	0	0.02	0.02	4	0	0	4	4
GVV 0210		CF1	48	52	0	0	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	7038	CF1	45	55	0	0	0.02	0.02	4	0	0	4	4
GVV 3030	7021	CF1	93	7	0	0	0.03	0.03	4	0	0	4	4



Subject to mistakes and technical changes.

The colours printed here may differ slightly than the actual colours. Please refer to our fabric swatch for exact colours.

RAL equivalent for orientation  $\bullet$  AS: solar absorption factor in %  $\bullet$  RS: solar reflection factor in %  $\bullet$  TS: solar transmittance factor in % • TV: light transmittance factor in % • gtot ext. for glazing type C • gtot ext. for glazing type D • Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501



# POLYESTER FABRIC SOLTIS®

#### Screen fabrics made of coated pre-tensioned polyester fabric

This fabric is made from high tensile polyester yarn and consists of a fine mesh fabric that is PVC-coated using the Precontraint technique. This creates an extremely stable fabric that will deform very little under stress. The fabric meets the specified requirements with high fabric tension combined with low sag and is therefore naturally well suited for large areas. The fabric is used for both horizontal and vertical applications, where transparency is a must.

Technical properties	Soltis Veozip	Soltis Horizon 86	Soltis Perform 92	Soltis Opaque B92 blackout fabric	Soltis Proof W96 waterproof fabric
Available width	3200 mm	1770/2670 mm	1770/2670 mm	1700 mm	2670 mm
Fire class	Euroclass NF EN 13501-1 (EU): b-s2 d0 NF P 92-507 (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): 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)	approx. 0.90 mm	approx. 0.43 mm	approx. 0.45 mm	approx. 0.60 mm	approx. 0.56 mm
Weight (EN ISO 2286-2)	approx. 600 g/m <sup>2</sup>	approx. 380 g/m²	approx. 420 g/m <sup>2</sup>	approx. 650 g/m <sup>2</sup>	approx. 620 g/m²
Tearing strength warp (DIN 53.363)	25 daN	45 daN	45 daN	45 daN	25 daN
Tearing strength weft (DIN 53.363)	25 daN	20 daN	20 daN	25 daN	20 daN
Breaking strength warp (EN ISO 1421)	250 daN/5 cm	230 daN/5 cm	310 daN/5 cm	330 daN/5 cm	220 daN/5 cm
Breaking strength weft (EN ISO 1421)	170 daN/5 cm	160 daN/5 cm	210 daN/5 cm	220 daN/5 cm	220 daN/5 cm
Opening factor	5%	14%	3%	0%	4-5%

# POLYESTER FABRIC SOLTIS® VEOZIP

A polyester fabric with a natural look and feel thanks to the use of hemp yarn. Thanks to its opening factor, the fabric offers an optimal balance between outside visibility on the one hand and glare protection on the other.

Ref	Ref.		RS	TS	TV	g <sub>tot</sub>	ext.	Thermal comfort C	Visual con- tact with the outside	Using natu- ral daylight	Glare	ivacy at night
itei.		AS	1.0	.0		С	D	The	Visua tact the o	Using ral da	ច	Privacy night
VZ-51184	CF	32.0	59.0	9.0	8.0	0.07	0.04	4	2	1	1	2
VZ-51185	CF	41.0	50.0	9.0	8.0	0.07	0.04	4	3	1	0	1
VZ-51186	CF	57.0	37.0	6.0	6.0	0.06	0.04	4	2	1	1	2
VZ-51187	CF	56.0	37.0	7.0	7.0	0.06	0.04	4	3	1	0	1
VZ-51194	CF	88.0	7.0	5.0	5.0	0.06	0.04	4	2	1	1	2
VZ-51198	CF	90.0	5.0	5.0	5.0	0.06	0.04	4	2	1	1	2



Subject to mistakes and technical changes.

# POLYESTER FABRIC SOLTIS® HORIZON 86

Def		AS	ne	Te	TV	g <sub>tot</sub>	ext.	Thermal comfort C	Visual con- tact with the outside	Using natu- ral daylight	Glare	Privacy at night	
Ref.		AS	RS	TS	1 V	С	D	The com	Visual con tact with the outside	Using ral da	ö	Priva niç	
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	
	CF1	49.0	35.0	16.0	15.0	0.15	0.12	2	4	2	0	0	
S86-2068	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	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 mistakes and technical changes.

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### POLYESTER FABRIC SOLTIS® PERFORM 92

						$g_{tot}$	ext.	mal ort	con- vith tside	natu- rlight	ē	sy at ht
Ref.		AS	RS	TS	TV	С	D	Thermal comfort C	Visual con- tact with the outside	Using natu- ral daylight	Glare	Privacy at night
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
2-2046	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
2-2048 (+)	CF1 CF2	46.0	46.0	8.0	8.0	0.09	0.07	4	1	1	1	2
2-50272	CF1 CF2	33.0	55.0	12.0	9.0	0.11	0.08	3	1	1	1	2
(+) 92-2171 (+)	CF1 CF2	51.0	41.0	8.0	6.0	0.10	0.08	3	2	1	2	2
(+)	CF1	62	34	4	4	0.08	0.07	4	2	1	3	2
92-2068	CF2	88	8	4	4	0.10	0.09	3	2	1	3	2
2-2074	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
2-2167	CF1 CF2	78.0	19.0	3.0	3.0	0.09	0.09	4	2	1	3	2
(+) 2-2047	CF1	87	8	5	5	0.11	0.09	3	2	1	3	2
(+) 2-51176	CF2 CF1	92.0	5.0	3.0	3.0	0.04	0.03	3	2	1	3	2
NEW) 2-2044	CF1	13.0	68.0	19.0	17.0	0.14	0.09	3	1	2	1	2
(+) 92-2175	CF2 CF1	16	65	19	17	0.14	0.10	3	1	2	1	2
(+) 2-50265	CF2 CF1	42	49	9	6	0.10	0.07	3	2	1	2	2
(+) 2-2012	CF2 CF1	63	30	7	6	0.10	0.08	3	2	1	3	2
(+) 2-2043	CF2 CF1	83	13	4	4	0.10	0.09	3	2	1	3	2
(+) 2-2135	CF2 CF1	45	46	9	6	0.10	0.09	3	2	1	1	2
.)	CF2	45	40	9	О	0.10	0.08	3		I	1	

Subject to mistakes and technical changes.

The colours printed here may differ slightly than the actual colours. Please refer to our fabric swatch for exact colours.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: solar transmission factor in % • TV: light transmission factor in % • gtot ext. for glazing type C • gtot ext. for glazing type D • Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501

CF1 = Confection side 1, top side of fabric sampler • CF2 = Confection side 2, bottom side of fabric sampler

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

### POLYESTER FABRIC SOLTIS® PROOF W96

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

Ref.		AS	RS	TS	τv	$g_{tot}$	ext.	Thermal comfort C	Visual con- tact with the outside	Using natu- ral daylight	Glare	ivacy at night
						С	D	Ţ 0	Visu tac the c	Using ral d	O	Privacy
W96-1103	CF1 CF2	16	67	17	16	0.13	0.09	3	0	2	2	4
W96-8102	CF1	12	71	17	17	0.12	0.08	3	0	2	2	4
W96-8861	CF1	24	63	13	9	0.11	0.08	3	0	1	2	4
W96-2171	CF1	39	52	9	4	0.09	0.07	4	0	1	2	4
W96-2047	CF1	86	11	3	3	0.1	0.08	4	0	1	3	4



Subject to mistakes and technical changes.

The colours printed here may differ slightly than the actual colours. Please refer to our fabric swatch for exact colours.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: solar transmission factor in % • TV: light transmission factor in % • gtot ext. for glazing type C • gtot ext. for glazing type D • Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501

CF1 = Confection side 1, top side of fabric sampler • CF2 = Confection side 2, bottom side of fabric sampler

# BLACKOUT POLYESTER FABRIC SOLTIS® OPAQUE B92

A blackout fabric sun protection is the ideal solution for bedrooms, whether installed inside or outside.

Ref	Ref.		RS	RS	TS	TV	g <sub>tot</sub>	ext.	Thermal comfort C	Visual con- tact with the outside	Using natu- ral daylight	Glare	Privacy at night
No.		AS				С	D	The	Visua tact the o	Using ral da	<u></u> 5	Priva	
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	87	13	0	0	0.08	0.07	4	0	0	4	4	
B92-1044	CF1	30	70	0	0	0.03	0.02	4	0	0	4	4	
B92-1045	CF1	62	38	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	
B92-51176 (NEW)	CF1	94	6	0	0	0.02	0.02	4	0	0	4	4	



Subject to mistakes and technical changes.

The colours printed here may differ slightly than the actual colours. Please refer to our fabric swatch for exact colours.

AS: solar absorption factor in % • RS: solar reflection factor in % • TS: solar transmission factor in % • TV: light transmission factor in % • gtot ext. for glazing type C • gtot ext. for glazing type D • Classification of thermal and visual comfort according to NBN EN 14500 & NBN EN 14501

CF1 = Confection side 1, top side of fabric sampler • CF2 = Confection side 2, bottom side of fabric sampler

# **TUFFSCREEN**

#### Insect fabric

For products with Fixscreen-technology, it is possible (and useful) to use an insect mesh. Thus the screen in the lowered position can prevent the entry of insects and other vermin.

Technical properties	
	Tuffscreen
Composition	Polyester fabric (Polyester 28% - PVC 72%)
Weight	240 g/m²
Mesh	17×13
Wire thickness	0.67 mm
Maintenance	Water with mild soap
Confection	HF welding (always with grey welding strip)
Hardness	High wind, moderate gale, near gale
Available min. width	3050 mm
Available colours	Black
Restrictions in fabric dimensions	No





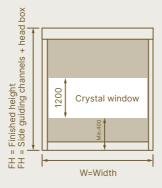
# **CRYSTAL FABRIC**

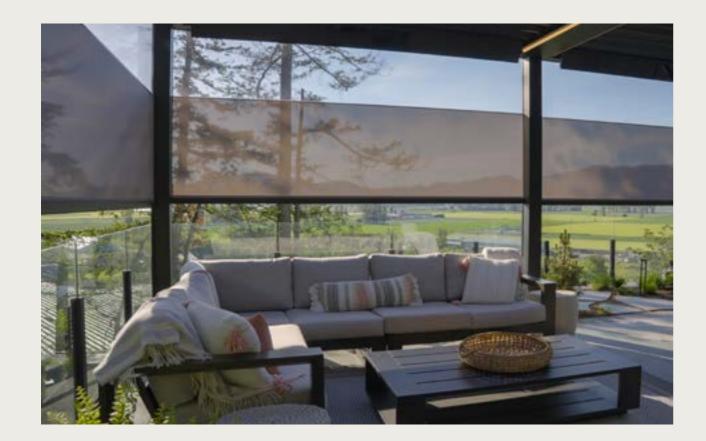


#### **Transparent fabric**

A transparent crystal fabric can be integrated into the fibre glass fabric of Fixscreen 100 Slim F and Fixscreen 150 F to maintain the best possible view of the outside.

The crystal window in the full width of the screen is 1200 mm high. There must be a distance of 400 mm between the crystal window in the full width and the bottom.





# **CUSTOM PRINT**

Aside from our standard range, fabrics can also be customised. Options include printing your business logo or a photo onto a screen underneath a patio cover.









# CONTROL

Motors	20
Renson® Connect Solmate®	20
Sensors	211
Operating methods	213
Choice guide	214
Accessories	217

# **MOTORS**

The motor is a crucial component when automating fabric sun protection. It is therefore very important to make the right choice for a reliable solution tailored to your needs. Optimum comfort and user-friendliness are guaranteed with all motors.

#### **Mechanical Somfy Motor**

The standard tubular motor for every application. Final adjustment is done thanks to a universal setting cable or directly on the motor head. Corded motors can be combined perfectly with a switch or home automation system.



#### **Detecto Renson motor Safety First**

With a Detecto Renson motor Safety First, the obstacle detection not only ensures optimum protection for the fabric sun protection but also provides continuous fabric tensioning. The motor also distinguishes between an obstacle and a gust of wind and automatically adjusts the end points. They can be combined perfectly with a switch or home automation system.



#### Radio-controlled Somfy IO motor

These radio-controlled motors offer all the advantages of existing motors and can be controlled by any IO homecontrol 1-way or 2-way control (via wireless remote control or wall switch or app). These controls also provide visual feedback of the screen position, either on the remote control or in the app. These motors can be set wirelessly.



#### Radio-controlled Somfy Solar motor

The Solar motor is a radio-controlled IO motor where the battery recharges itself thanks to the durable solar panel. This motor offers all the advantages of radio-controlled motors, i.e. wireless end limit settings and control.



WIRED MOTORS RADIO-CONTROLLED SOMFY MOTORS Control via wired wall switch Control via wireless remote control or wall Combines perfectly with switches or switch home automation systems (Building Suitable for app control with Somfy home automation system management systems Legrand, NHC. KNX...) Mechanical Somfy Detecto Renson mo-Somfy IO Motor Somfy Solar Motor tor Safety First



Motor type







Connection				
Power Supply	Mains power	Mains power	Mains power	Solar power
Parallel switching 2 or more motors	✓ via relay	~	~	~
Setting end points				
Physical setting on the motor	~	-	-	-
Setting with remote control	-	-	~	~
Setting remotely via Set&Go	-	-	~	-
Automatic setting via setting cable	-	~	-	-
Applicability				
Fixscreen	~	~	~	-
Fixscreen Solar	-	-	-	~
Fixscreen Minimal	-	~	~	-
Fixscreen Minimal Solar	-	-	-	~
Panovista	~	<b>/*</b>	~	-
Panovista Max	~	-	~	-
Topfix	~	-	~	-
Topfix Max	~	-	~	-
Topfix Max F	-	-	~	-
Vegascreen	<b>~</b>	-	<b>~</b>	-
Radio-controlled features				
Motor position feedback (2-way)	-	-	~	~
Range	-	-	20 metres through two concrete walls.	20 metres through two concrete walls.
Signal frequency  * Without obstacle detection	-	-	868.25 Mhz (Not suitable for use in US, China, Canada or Australia, among others)	868.25 Mhz

RENSON'

# RENSON® CONNECT with smart Solmate® control Renson<sup>®</sup>, your SOLMATE<sup>®</sup> for a refreshingly cool home The unique Solmate control, together with the Somfy TaHoma from the Renson Connect Pack, allow screens to be controlled in a fully automatic and smart way. The end user's preferences and most up-to-date cloud data are all Solmate needs for this. Without sensors for outdoor temperature or sun radiation, and without an additional home automation system, screens can therefore be intelligently controlled during renovation or retrofit, as well as for new builds. The user remains in control at all times: you choose which rooms, on which days, and at what time you want the sun protection to operate automatically. RENSON"

# Smart algorithm for optimal indoor climate, within a user-friendly app



#### All the advantages of our unique smart screens at a glance:



#### **Smart Control**

The unique Solmate algorithm takes into account local weather parameters such as temperature, solar irradiation... as well as personal preferences. Warm weather forecast? Solmate switches the heat off efficiently!



#### **Voice Control**

"Hey Google, close all the screens in the living room..." It is sufficient to control the Renson smart screens, also compatible with other Smart Home platforms such as Amazon Alexa and Apple Homekit



#### **Product Details**

What are the exact dimensions of the screens and which fabric type did you choose? In the Renson Connect app, find all relevant product details for checking later.



#### **Multiple locations**

Would you like to be able to check the status of the screens when you're away from home? Or change your personal preferences remotely for a second home? It can all be done in the same Renson Connect app thanks to the smart screens.



#### Configuration easy as 1-2-3

Finished installing the screens and the Somfy TaHoma Switch from the Renson Connect Pack? Then download and configure the Somfy TaHoma app and then the Renson Connect app. Register, log in with the Somfy credentials, and you're good to go.



#### **Tips & Tricks**

How does your customer optimally maintain the screens? What to do after an unexpected rainstorm? The Renson Connect app provides regular 'tips & tricks' for a healthy indoor climate, the ideal lifespan and optimal operation of the screens.

! Availability depending on geographical location!









#### CONFIGURATION

The Renson® Connect app with smart Solmate control is easy to configure and operate. The application is currently available in combination with all radio-controlled Renson® screens

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# **SENSORS**

These sensors monitor your comfort and respond fully automatically based on changes in a specific situation. They do so based on pre-set scenarios, to meet your needs and requirements and/ or based on weather circumstances. Our sensors continue to operate fully autonomously when you're away from home, extending the lifespan of your sun protection. In addition, automated sun protection can reduce your energy consumption by no less than 36%.

#### Wind sensor

A wind sensor can retract your sun protection depending on a pre-set wind speed. This protects your screen against unexpected strong winds. Our wireless sensor is easy to install and only requires minimum wiring.



#### Sun sensor

A sun sensor responds to the intensity of the sun and can control your sun protection accordingly. This way, the inside temperature of your home is always kept under control, even when you're away. Our wireless sensor can be used on a façade or on the inside of a window and is easy to install and set up.



#### Wind & sun sensor

A wind & sun sensor responds to both sun intensity and wind speed.



Choice guide? See page 214



### **OPERATING METHODS**

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

#### Wired wall switch

Thanks to a fixed pressure switch near the screen, you can operate it easily and efficiently. These switches can be surface-mounted or recessed.



#### Wireless wall switch

Local wireless wall switch powered with batteries. The wireless design allows you to place this switch anywhere you like on the wall. Simply affix the adhesive strip on the back of the switch to the surface.





#### Wireless remote control

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



#### **Group control by touch**

Group control by touchscreen for easy control.

- Select and control all products by tapping the screen
- Control the applications individually or in a group
- Configure the controls according to the layout in your home
- Create scenarios
- Operate with natural movements



#### Smart control with Renson® Connect Solmate®

See page 208



Choice guide? See page 214

# **CHOICE GUIDE**

# **MOTORS**

	Local control					
Type of local control	Via wired wall switch	n (max. 2 per switch)	Via wireless remote control or wall switch			
Couple with sensor(s)?	Coupling with ser	nsors not possible	Coupling with sensors possible			
Obstacle detection	· -		-	-		
Warranty (year)	7 5		5	7		
Result	Detecto RMSF	Somfy Mechanical	Somfy IO	Somfy Solar		

Home automation						
Control type	Wired home automation system (KNX, Niko Home Control, Qbus, Loxone)  Wireless home automation system (Somfy TaHoma) + wireless remote control or wall switch					
Couple with sensor(s)?	Coupling with sensors possible					
Obstacle detection	· -		-	-		
Warranty (year)	7	7 5		7		
Result	Detecto RMSF	Somfy Mechanical	Somfy IO	Somfy Solar		



# **SENSORS & CONTROL**

					Somfy IC	)	
Couple with sensors	?		Υ	es			No
Sensor type	W	/ind	S	un	Sun +	· Wind	
Power supply senso	Wired (230 V)	Wireless (battery)	Wired (230 V)	Wireless (battery)	Wired (230 V)	Wireless (battery)	
Result	Eolis IO	Eolis Wirefree IO	-	Sunis Wirefree IO	Soliris IO	Sunis IO & Eolis Wirefree IO	-

Number of screens to control	1 screen	2-5 screens	5+ screens	1 screen	2-5 screens	5+ screens
Wireless remote control	Situo 1 A/M IO	Situo 5 VAR A/M IO	Nina IO	Situo 1 IO	Situo 5 IO	-
Wireless remote control  Wireless wall switch	-	-	-	Smoove origin IO / Smoove 1 IO	Smoove 4 origin IO	-
App control	Renson Connect Solmate (in combination with Somfy TaHoma Switch)					

	Somfy Mechanical				
Number of screens to control	1 motor or relay		2 motors or relay		
JO	Surface-mounted	recessed	Surface-mounted	recessed	
Wall-mounted remote control with fixed zero point (keeps running until end position)	Inis surface-mounted (fixed)	Smoove Uno (fixed)	-	Smoove Duo (fixed)	
Wall-mounted remote control with auto-matic zero point (stops when stop is pressed)	Inis surface-mounted (auto)	Smoove Uno (auto)	-	Smoove Duo (auto)	



# **ACCESSORIES**

You already have a wide choice of different types of motors, controls and sensors, all to enhance comfort. Choose extra installation convenience with the following accessories.

### **Detecto Renson motor Safety First setting cable**

Set tubular motors safely and easily with a setting cable. This is suitable for setting tubular motors and resetting the end points if necessary. There are setting cables available for Detecto Renson motor Safety First.



### The Set & Go installation tool for IO-homecontrol applications

This handy installation tool allows you to easily set IO motors in combination with your PC, laptop, notebook or tablet with a windows operating system.



### Additional cable length

It is possible to extend the motor cable if local conditions require it. The standard cable length is 3 or 5 metres, depending on the motor type. This cable length can be extended to 10 metres for efficient connection to the mains. If the cable length is still not sufficient, a Hirschmann connector can be chosen for a safe and durable connection.



Choice guide? See page 214



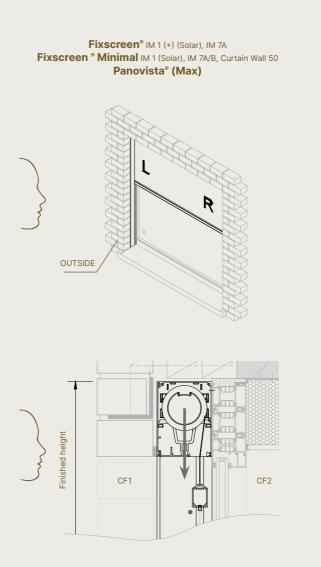
# **GENERAL**

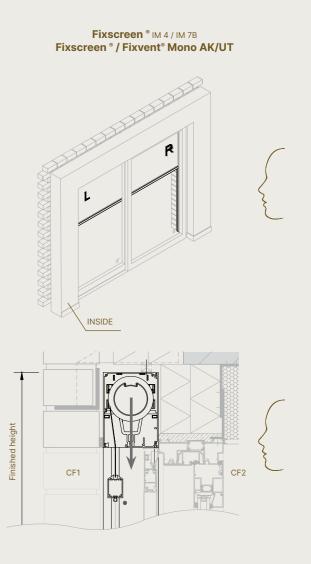
Cable feed position and confection side	
How do I measure a screen?	222
Standard	224
Warranty	226
Maintenance	227



With vertical fabric sun protection, the position of the cable feed depends on the choice of product and the chosen installation method. Each position has a particular code and can be positioned to the left or right as required. The perspective for determining the choice of left or right cable feed is indicated on the technical drawings in our brochure using the following illustration of a face, For the Panovista (Max) corner solution, this perspective also determines the section width on the left or right.

All fabrics have two sides. A small difference can be noticed in the weave of woven fabrics Confection side 1 (CF1) is the top side of the fabric sample in the Renson fabric sampler. This is how the screen fabric appears from the outside. Confection side 2 (CF2) is the bottom side of the fabric sample in the Renson fabric sampler. The confection sides are indicated with CF1 and CF2 on all technical drawings.

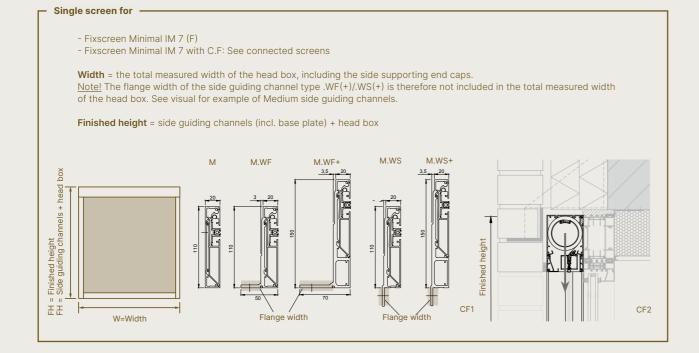


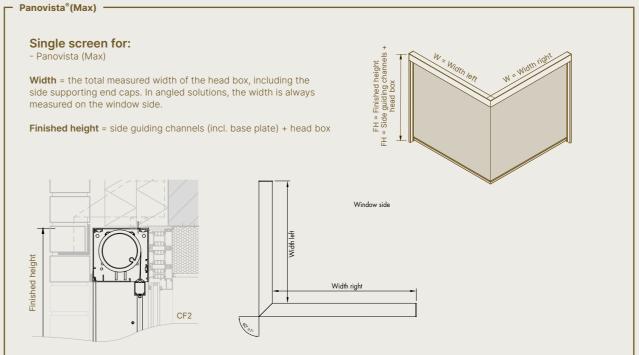


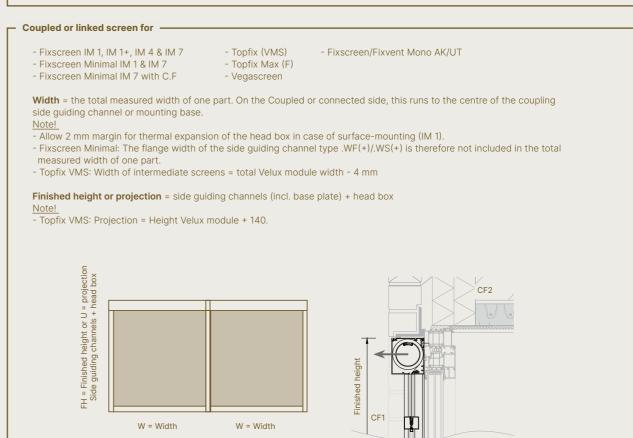
# HOW DO I MEASURE A SCREEN?

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.

# - Fixscreen IM 1 (Solar) (F), IM 4 & IM 7 (F) - Fixscreen Minimal IM 1 (Solar) (F) - Fixscreen Minimal IM 1 (Solar) (F) - Fixscreen Fixwent Mono AK/UT - Topfix (VMS) - Topfix (VMS) - Topfix Max (F) - Vegascreen Width = the total measured width of the head box, including the side supporting end caps. Note! - Allow 2 mm margin for thermal expansion of the head box in case of surface-mounting (IM 1). Finished height or projection = side guiding channels (incl. base plate) + head box Note! - Topfix VMS: Projection = Height Velux module + 140.





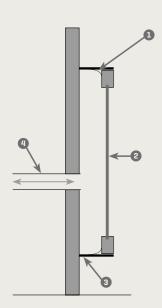


# **STANDARD EN13561**

This sun protection meets the European standard EN 13561. This standard addresses the performance and safety requirements applicable in construction, transport, installation, control and maintenance. This performance is evaluated based on various tests and/or calculations.

### This standard has two objectives:

- 1. Defining the technical performance of the product. This technical performance should allow the safe application of the products to be evaluated.
- 2. Providing the basis for CE marking. CE marking refers only to properties imposed by the regulator when a product is placed on the market. From 1 July 2013, manufacturers are required to provide a Declaration of Performance with CE-marked products. The Declaration of Performance is drawn up by the manufacturer and provides information on the main performance of the product and its intended use.



# Vertical section of the wind tunnel:

- Seal
- 2 Sample
- Wind frame
- Connection to a fan (≥ 10 000 Pa) and measurement of the underpressure and overpressure

### Result

The pressure gradually increases. At pressure of 600 Pa, the zip was pulled from the side guiding channel without tearing.

Wind class	Nominal test pressure p (N/m²)	Safety test pressure 1.5 p (N/m²)
0	< 40	< 48
1	40	48
2	70	84
3	110	132

**Pressure tests**: Pressure tests are carried out to determine which wind class sun protection systems belong in (according to EN 13561). This is a test in a wind tunnel in accordance with NBN EN 1932. Underpressure and overpressure on the wind tunnel is simulated using a fan and a system of electrically controlled valves.





### Wind tunnel tests

In addition to pressure tests, wind tunnel tests are highly suitable for determining the wind resistance and durability of sun protection systems. Wind tunnel tests are not standardised. But Renson® carries out wind tunnel tests anyway as they provide more truthful results. This forms the basis for the warranties we offer on our products.

In the Fixscreen tests, the sun protection is exposed to wind speeds as high as 130 km/h. This is equivalent to a hurricane force of 12 Beaufort. The fabric remains taut during these wind speeds, there is no gap between the guiding channel and fabric, and the zip stays in the guiding channels.



Non-windproof sun protection



Fixscreen® at 130 km/h

Beaufort	Description	Average	Average	Effects
		speed in m/s	speed in km/h	
0	Calm	0 - 0.2	< 1	You don't feel the wind. Smoke will rise virtually straight up.
1	Light air	0.3 – 1.4	1 - 5	Wind direction can be read from the smoke plume, but not from the weather vane.
2	Light breeze	1.5 – 3.4	6 – 12	Wind can be felt on the face, leaves rustle, the weather vane moves visibly with the wind.
3	Gentle breeze	3.5 - 5.4	13 – 19	Flags wave and leaves move about constantly.
4	Moderate breeze	5.5 – 7.4	20 – 27	Dust blown up irritates eyes. Hair is awry.
5	Fresh breeze	7.5 – 10.4	28 – 37	Bushes rustle, white wave peaks on lakes and canals.
6	Strong breeze	10.5 – 13.4	38-48	Umbrellas are difficult to hold on to, large branches sway, power lines hum
7	High wind, moderate gale, near gale	13.5 – 17.4	49 - 62	It is difficult to walk into the wind.  Trees sway.
8	Gale, fresh gale	17.5 – 20.4	63 - 73	Making headway is very difficult. Small branches break off.
9	Strong/severe gale	20.5 – 24.4	74 – 87	Chimney tops, roofing tiles and aerials blow away.
10	Severe storm	24.5 – 28.4	88 – 102	Adults blow over. Major damage to buildings.
11	Major, severe storm	28.5 – 32.4	103 – 117	Major damage to houses and forests.
12	Hurricane	> 32.5	> 118	Total destruction.

# **WARRANTY**

At Renson® we exclusively use high quality materials. This ensures your customer enjoys an extended warranty period on all parts and your peace of mind is guaranteed.

### As a manufacturer, we guarantee:

- 5-year product warranty on all defects arising from normal domestic use and provided regular maintenance has been carried out. (Annual maintenance required for Panovista Max.)
- 5-year warranty at gloss level for aluminium profiles.
- 5-year warranty on the Somfy® motors & automation, with the exception of the Solar pack.
- 5-year warranty on fabric collection (2-year warranty on Crystal fabric)
- 5-year warranty on Fixscreen-technology for freestanding Fixscreen applications, Fixscreen Minimal and Topfix Max.
- 7-year warranty on the Fixscreen-technology for Fixscreen, Fixscreen Minimal, Panovista, Topfix (VMS) and Topfix Max zip remains in side guiding channel optimal attachment of zip to fabric.
- 7-year warranty Panovista Max technology with annual maintenance.
- 7-year warranty on the Detecto motor and the Somfy Solar pack.
- 10-year warranty on all coatings on the aluminium profiles.







### **WARRANTY PERIOD**

Starts on the date of production and applies only to the product itself, and not to its installation. The warranty is only valid if the product is used and maintained in accordance with the prescriptions contained in the user manual. The warranty is voided if the product is used incorrectly or in an abnormal way. When reporting a problem, always state the warranty number.



RENSON

## warranty and product information now easier to access

To ensure the warranty process runs smoothly, Renson always asks for your warranty number, Renson® uses this to offer you optimal support. The Renson® warranty number can be found on the guarantee certificate, and also on the unique QR code on the screens. Scan this QR code to find essential product information in an instant.



# **MAINTENANCE**

Fabric sun protections require little maintenance. If used carefully, your sun protection's lifespan can be extended by many years.

### A few general directives:

- If the fabric gets wet during an unexpected shower, you can roll it up before lowering it again in better weather to let it dry. Do not allow the fabric to stay rolled up wet for more than three days so as to prevent mould and stains.
- Before cleaning, remove loose dirt with a brush. You can then use a cleaning product (avoid caustic products) and lukewarm water to remove any remaining dirt. Always rinse the fabric after cleaning. Do not clean the fabric in direct sunlight: If soapy water dries too quickly, it may leave stains on the fabric.
- · We recommend against the use of high-pressure cleaning devices.
- Do not use abrasive products to clean.
- Hinged or rotating parts should be lubricated annually. A dry lubricant (Teflon) should be used to do so.
- Regularly check your screen for twigs, leaves, etc. and remove them. Maintain this product with due care and attention. As a manufacturer, we recommend a regular technical inspection by the installer: annually for commercial buildings and every two years for sun protection at home.
- For non-aggressive environments, we recommend six-monthly maintenance. For aggressive environments (sea, heavy industry, etc.), we recommend frequent maintenance, around four times a year.
- Always use original parts from the manufacturer.

### Maintenance is easy with the Renson® Maintenance Set

- The structure is made using powder coated aluminium. Yearly cleaning with the **Renson® Maintenance**Set will make sure the intense colour of your cover is maintained for years and provides extra protection from acid rain, sea air and UV rays. For coastal and wooded areas, we recommend that you perform maintenance on your products at least twice a year.
- Renson® 'Clean' is a concentrated product with strong cleaning and degreasing properties that acts
  against the most common types of natural dirt, such as dust, oily rainfall, grease stains, moss, insect
  remains, and so on.
- This product cannot be compared to other cleaning products on the market. It penetrates deeply and 'lifts out' the dirt. Renson 'Clean' can also be used to clean polyester roof fabrics and vertical fibre glass screen fabrics.
- After cleaning, make sure you protect your aluminium structure using **Renson®** 'Protect'. This product leaves a protective film that enables you to clean the surface by simply wiping it down using a small
- amount of **Renson®** 'Clean'. It also protects the aluminium from acid rain, sea air and UV radiation, and ensures the colour remains just as intense.
- Do not use either product in direct sunlight or in hot weather. The product's quick-drying action can leave stains on the structure or the fabric screen. Do not use corrosive or aggressive products, scouring pads or other scouring products. You should also not pressure-wash your products under any circumstances.





Renson® Maintenance Set

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# RENSON COLOURS

We offer a wide range of colours. Available as standard in approximately 100 different colours with gloss level 70%, gloss level 30%, or textured coating. This ensures that fabric sun protection always integrates seamlessly with the style of the building. The choice is yours: a glossy or matte version, or a trendy textured coating that is not only wear- and scratch-resistant, but also easy to maintain.

To guarantee the colourfastness of the coating, we recommend Seaside Quality for coastal areas and other aggressive environments (heavy industry, etc.) This ensures that the screen's coating always remains in perfect condition and looks like new even after many years.

### Bi-colour

If desired, the head box, both side guiding channels, the bottom bar and mounting feet can be finished in two different colours, depending on the look of the building and the customer's requirements.

For example, in the case of a Fixvent Mono AK, the inside of the head box can be chosen to match the interior while the outside can match the profiles on the outer side of the façade.







# **GLOSSARY**

### **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.

### **Anodization**

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 PE-foam 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.

### 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 245 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 set. During installation, the fabric set simply clicks to the head 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 head box and a male part on the fabric set. The Connect&Go-technology guarantees a quick, safe and simple installation of the fabric set, the motor and the fabric. Dismounting the fabric set barrel is also efficient. The Connect&Go-technology consists of a patented, splash proof electrical connector in two parts: a female part in the head box and a male part on the fabric set barrel package. See page 20.

### Coupled

Coupled screens are two different screens in which case the head 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

### **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 set and the bottom bar.

### Fabric set

The fabric set 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 set end piece

The patented fabric set end pieces are conical (cone shaped) to compensate for the thicker ends of the rolled up zip 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 head 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.

### 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 zip 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%.

### Head box

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

### Head box extension

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



### 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**

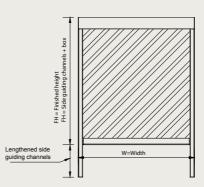
For horizontal sun protection, the inclination angle is requested to determine which type of fabric can be used and which dimensions can be realized, in order to offer the best technical solution, for instance to prevent water sagging and/ or wrinkling.

### 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 guiding channels can be extended. The additional length of the side guiding 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 head boxes. Both screens have their own motor, own head 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. Powder coating 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.

### Printing

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 head box. This measure is important to determine the order size of the horizontal screen.

### **PVC** side guiding channel

In every side guiding channel, there is a PVC side guiding channel with co-extruded wear-resistant top layer (also see Smooth-technology). This PVC side guiding channel is provided with buffer zones to compensate wind gusts. The zip, 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® Connect

The ideal solution for operating your Renson® screens by smartphone.

Forgotten to close your screen on a hot day? No problem, now you can do it remotely. So it's lovely and cool when you get

### 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).

### Renson® Connect Solmate®

Our unique Renson Connect Solmate system automatically controls your fabric sun protection based on your personal preferences and local weather parameters such as the temperature and the sunlight coming in. For example, your sun protection will automatically be lowered when the sun is shining brightly. This prevents excessive indoor temperatures and the need for additional cooling.

### 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)

### Seal strap

Side edges of fiberglass fabrics that do not have a zip 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 2 g/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 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.



### **Setting cable**

Thanks to a setting 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. Setting cables are available for Detecto Rensonmotor Safety First, Rensonmotor 24V and Becker SMI motors. See page 245 for further explanation.

### 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 zip 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 20 for further explanation.

### Symmetric zip

For products equipped with Fixscreen-technology, the sun protection fabric has a symmetrical zip 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 fibre glass yarns, there are small holes between the threads. This is technically described as the opening factor of a fabric.

### Welding seam

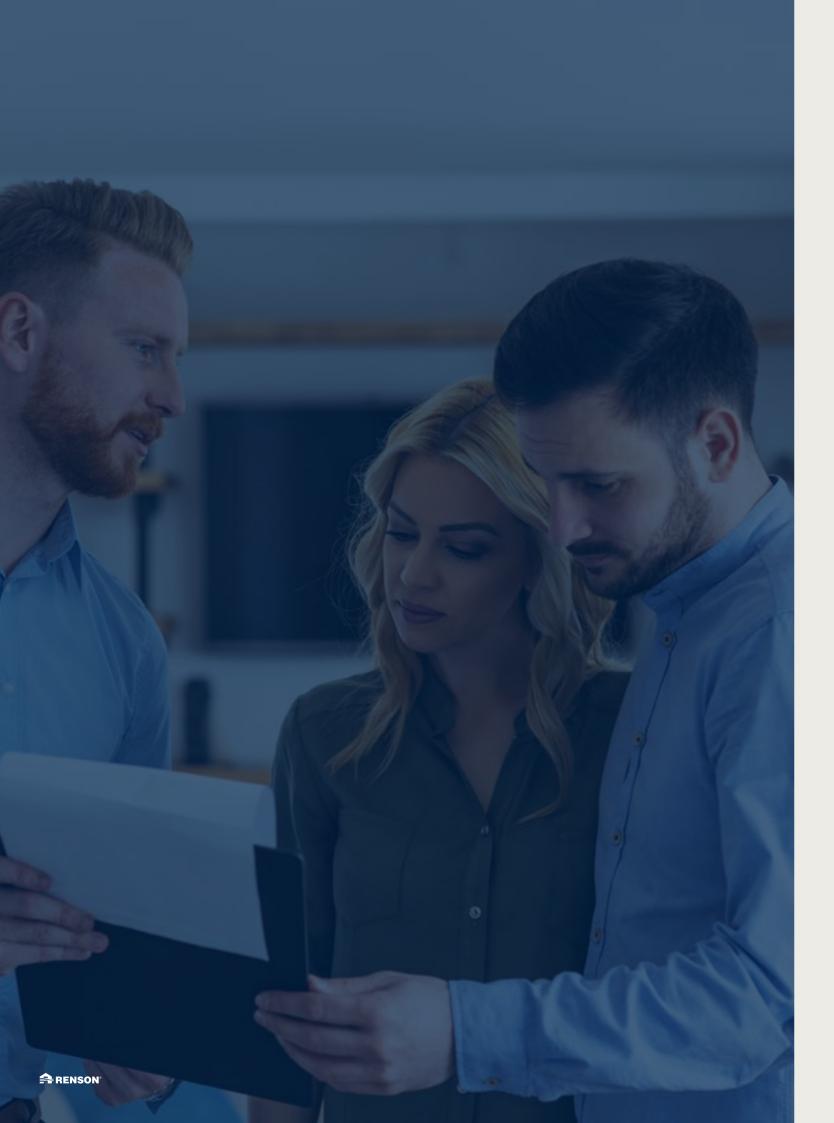
If both width and height are greater than the fabric set width, it may occur that a weld seam is visible so that both fabric parts can be connected to each other. The position of the welding seam differs from fabric to fabric and from the dimensions of the fabric. The welding seam height is always calculated 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 head box, including the side guiding channels.







# **AMBASSADORSHIP**

You are convinced about our products and enthusiastically share this with the world. In turn, we are proud that you are the connecting factor between Renson and your customers. Just for you, we created the Renson Ambassadorship: a long-term partnership.

This quality label guarantees your customers that you are a reliable expert in ventilation with excellent product knowledge and perfect service, from installation to the first service visit.

What does your Ambassadorship stand for?

- You share your passion for Renson with a strong professional network.
- Every two years, you will be invited to our Ambassador Days where you can network with your colleagues to your heart's content.
- You are among the first to gain access to innovative and market-specific products and solutions.
- You have access to exclusive promotions for end customers, supported by media campaigns (online/offline).
- Through our lead tool, you will get one-to-one leads per region, which we receive via our communications, trade shows and events.
- We put you in the spotlight regularly and support you through co-branding to develop the Renson brand in your region.
- We promote you to your end customers.
- You may wear the exclusive quality label of Renson Ambassador.

WANT TO JOIN OUR RENSON AMBASSADOR FAMILY? GET IN TOUCH WITH YOUR RENSON CONTACT.





