

THE FIRST SUN PROTECTION SCREEN THAT IS BOTH WIND TIGHT AND INSECT PROOF

# FIXSCREEN®

FIXSCREEN® 85 • FIXSCREEN® 100 • FIXSCREEN® 150



## INTRODUCTION

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ICARUS® RENSON HQ, Waregem (BE), Architect: Jo Crepain, Photo: Nike Bourgeois

### Need for sun protection

A property with windows and other glazed surfaces facing south allows the occupants to enjoy the beauty of the sun in autumn, winter and spring but in the summer the sun's rays often become much too powerful for unshaded windows, resulting in overheating and problems with glare.

External sun screens can help prevent the amount of solar gain and the amount of light entering the building so that the internal environment can be made more comfortable. External sun protection not only provides these benefits but it also ensures that the outside view is maintained.

### KYOTO protocol

Over 170 nations including all those of the EU have signed and ratified the Kyoto Protocol. There is significant evidence that human activity is causing rising CO<sub>2</sub> emissions, a major constituent of the greenhouse gases responsible for climate change. If we wish to reduce the greenhouse effect, less energy must be consumed. The cooling of buildings is an activity that uses a great deal of energy. Yet the use of appropriate external sun protection screens can have a dramatic effect on reducing the heat entering the building, significantly reducing, or in some cases eradicating, the need for this artificial cooling.

To ensure the necessary focus on energy performance in buildings various EU governments have already enshrined elements of the Kyoto accord into national legislation such as:

- Belgium: 'Regelgeving van Energieprestatie & Binnenklimaat (EPB)'
- the Netherlands: 'Energie Prestatie Coëfficiënt (EPC)'
- France: 'Règlement Thermique 2005 (RT2005)'
- Germany: 'Energieëinsparverordnung'
- United Kingdom: Approved Document L2 'Conservation of fuel and power in buildings other than dwellings'



ICARUS® RENSON HQ, Waregem (BE), Architect: Jo Crepain, Photo: Nike Bourgeois



FIXSCREEN® RENSON HQ, Waregem (BE), Architect: Jo Crepain



FIXSCREEN® has been developed by Kestelyn Sunprotection, a Belgian company with a proven heritage in external sun shading and is the first screen in the world that is truly wind-resistant.

FIXSCREEN® uses an ingenious zip system securely fastened to the edge of the screen which then is permanently held in the side guides of the system, making the screen wind-resistant in every position and insect repellent when fully closed.



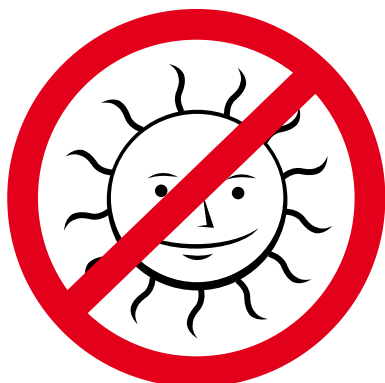
FIXSCREEN® represents a major advance in external sun screening affording protection from heat and glare and yet still allowing view to the outside. The flexible product range includes models which are suitable for both domestic and commercial building applications.

FIXSCREEN® is available in three sizes of wind-resistant screens:

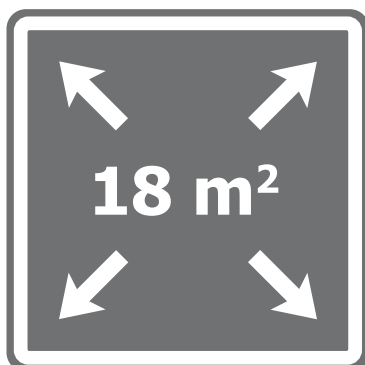
**FIXSCREEN® 85** Ideal for windows up to 2.5m wide and 1.6m high. This screen is used extensively for most standard windows and in renovation projects.

**FIXSCREEN® 100** A larger system suitable for glazing up to 4m wide and 2.7m high or 3m wide and 3.5 m high.

**FIXSCREEN® 150** The biggest screen in the programme which will cope with extremely large glazed areas – up to 6m wide and 3m high or vice versa (18m<sup>2</sup>).



The hardware systems are supported by a comprehensive range of screen materials in colours to compliment, or perhaps contrast, with your building but helping to provide a pleasant living and working environment.



As you would expect with a market-leading company, all aluminium profiles are manufactured from an EN AW-6063T66 alloy. All screen fabrics are extremely durable and rot resistant and all fixings are made from stainless steel. The aluminium profiles used in FIXSCREEN® can even be powdercoated to any RAL colour of your choice.

## ADVANTAGES OF FIXSCREEN®

### Wind-resistant screen

FIXSCREEN® meets the requirements of the European standard EN 13561 (Wind Resistance class 3) making rattling and unsightly ripped screens a thing of the past.

### No wrinkles

The fabric is held taut providing a flat, unwrinkled screen.

### Control of light

FIXSCREEN® stops the sun's rays before they come into contact with the surface of the glass significantly reducing glare and reflections. The degree of transparency is dependent on the type of screen chosen. However, the beauty of external screens is that you do not lose visual contact with the outside world.

### Control of heat and energy use

External sun protection helps to prevent overheating by stopping the heat entering through the glass. This makes for a much more natural and comfortable internal environment and allows substantial savings on cooling and air conditioning costs.

In the winter months external screens can still play their part in reducing energy consumption. Raising the screen allows the free solar heat to enter while closing the screens at night limits the amount of heat loss through the glazing.

### Insect proof

Intensive ventilation is possible with FIXSCREEN® and yet with the screen fully lowered, it is insect proof as the bottom rail is fitted with a plastic sealing profile to ensure a perfect closure on the sill.

### Quiet operation

As the fabric is permanently held in the side channels, the bottom rail is securely held too, ensuring it does not rattle.

### Easy operation

Available with manual or electrical operation.

### Easy maintenance

FIXSCREEN® only requires a minimal amount of maintenance.

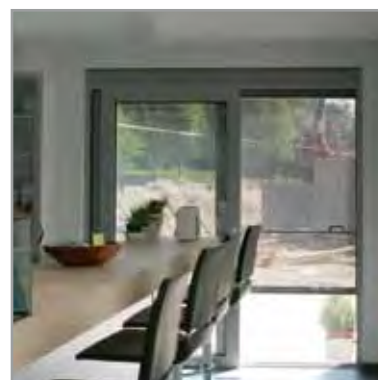
### Easy installation

Flexible installation options allow for FIXSCREEN® to be fitted:

- Outside installation
- Inside installation: built-in type with box (with or without front cover)
- Inside installation: built-in type without box, with brackets

### Flexible range of sizes

FIXSCREEN® can cater for a range of sizes from standard windows up to extremely large glazed surfaces (with a maximum surface of 18 m<sup>2</sup>).



## TECHNICAL PERFORMANCE OF FIXSCREEN®

FIXSCREEN® has undergone an extensive range of tests to ensure the product performs to the highest possible standards:

### WIND TESTS

Wind tunnel tests at the Von Karman Institute for fluid dynamics.

Wind tunnel test report from the Von Karman Institute (nr. EAR0410)

Maximum wind load (FIXSCREEN® 2000 x 2000 mm)



FIXSCREEN® 120 km/h



Screen standard 30 km/h

**CONCLUSION:** To be covered by the guarantee, the screen must be rolled up during wind speeds over 80 km/h.

### THE BEAUFORT SCALE

Beaufort	Description	Average speed m/s	Average speed Km/h	Result
0	Calm	< 0,2	< 1	No wind felt. Smoke rises vertically.
1	Light air	0,3 à 1,5	1 à 5	Direction of wind shown by smoke.
2	Light breeze	1,6 à 3,3	6 à 11	Wind is felt on the face; leaves rustle; weather vanes turn
3	Gentle breeze	3,4 à 5,4	12 à 19	Wind extends flags and leaves in motion
4	Moderate breeze	5,5 à 7,9	20 à 28	The wind raises dust. Hats are blown off.
5	Fresh breeze	8,0 à 10,7	29 à 38	Small trees sway; small waves form on inland waters.
6	Strong breeze	10,8 à 13,8	39 à 49	Umbrellas are used with difficulty; large branches in motion; whistling heard in telegraph and electric wires.
7	Near gale	13,9 à 17,1	50 à 61	Walking against the wind becomes difficult; whole trees in motion.
8	Gale	17,2 à 20,7	62 à 74	Walking against the wind is very difficult; twigs broken off trees.
9	Severe gale	20,8 à 24,4	75 à 88	Chimney pots, aerials and tiles removed by the wind.
10	Storm	24,5 à 28,4	89 à 102	Adults blown over; severe damage inflicted on dwellings.
11	Violent storm	28,5 à 32,6	103 à 117	Wide-spread damage inflicted on houses and trees
12	Hurricane	> 32,6	> 117	Damage becomes disastrous and devastating

## TECHNICAL PERFORMANCE OF FIXSCREEN®

### PRESSURE TESTS

Destructive test at the WTCB

Maximum pressure load i.a.w. NBN EN 1932 version 2001

Durability test report from the WTCB (nr. 651 XE823 CAR4139)



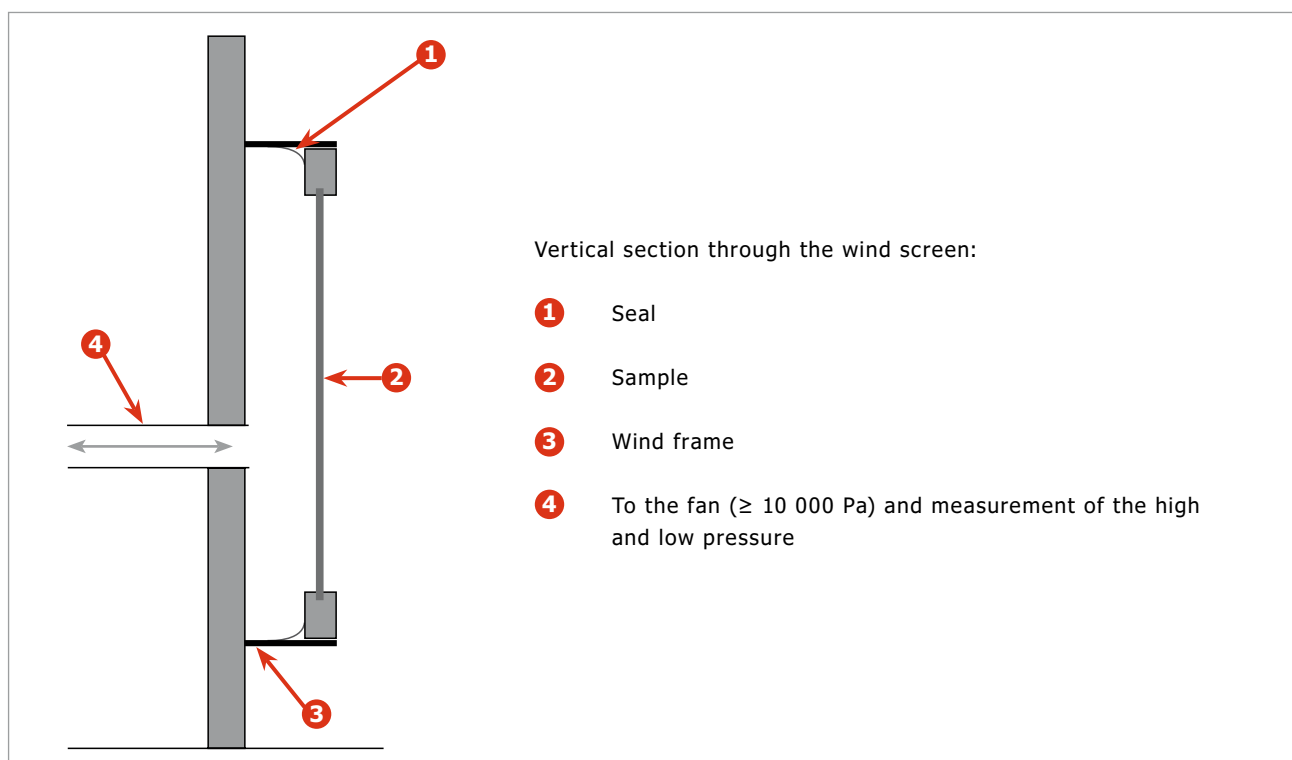
335 Pa

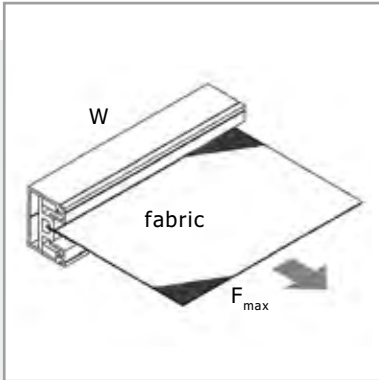


Max. 600 Pa

### CONCLUSION

The pressure was increased in steps of 50 Pa up to 600 Pa. At 600 Pa the left-hand zip came out of the side channel. No damage was therefore incurred by the sample.



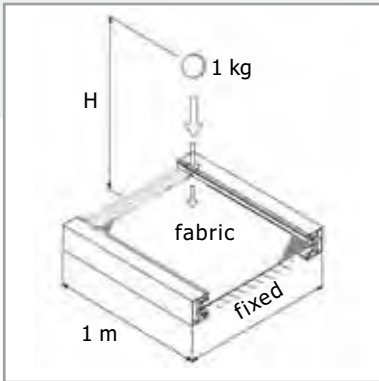


### TENSION TEST

Permissible tension  $T_{max}$

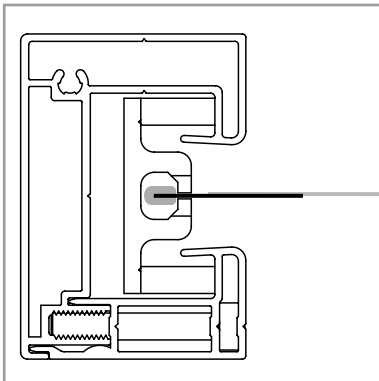
$$T_{max} = F_{max} / W = 13,5 \text{ (kg/cm)}$$

- Conditions: - FIXSCREEN® symmetrical zipping principle  
 - Aluminium side channel 34 mm  
 - PVC side channel



### COLLISION TEST

- Test: (1kg) ball falls from different heights onto the screen  
 Result: Fabric tears apart before the zip-structure gets broken  
 Screen sample under test: SERGE glass-fibre screen

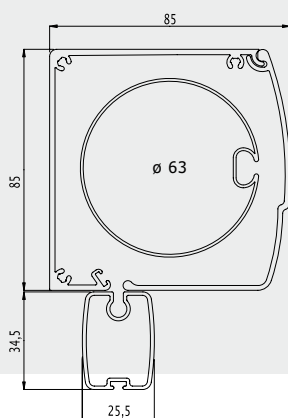


### FABRIC SELECTION

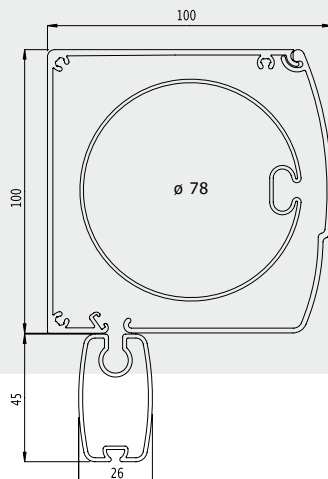
- All the internal and external fabrics which are recommended and available in the market.  
 Black-out fabrics are only approved for use in the interior of buildings.

## PRODUCT CHARACTERISTICS

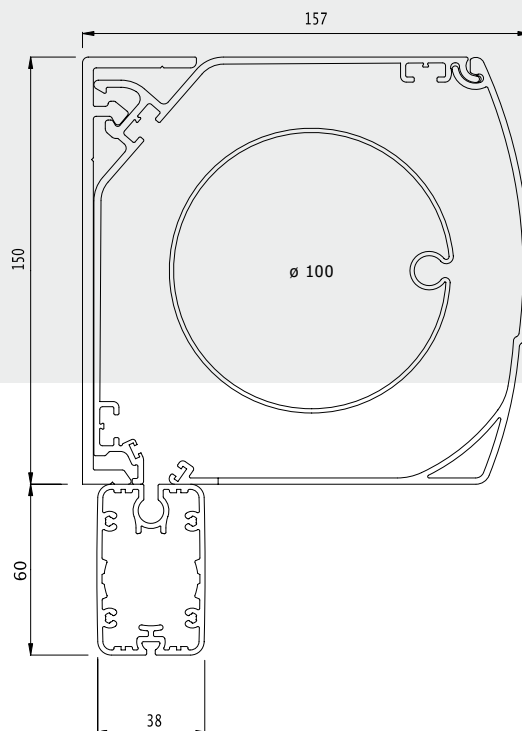
**FIXSCREEN® 85**



**FIXSCREEN® 100**

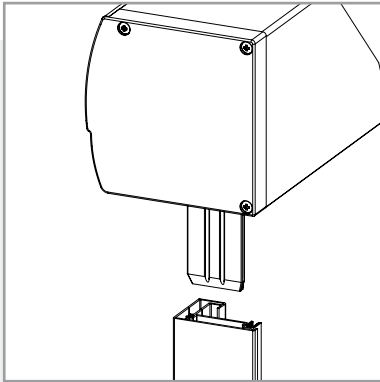


**FIXSCREEN® 150**



	<b>FIXSCREEN® 85</b>	<b>FIXSCREEN® 100</b>	<b>FIXSCREEN® 150</b>
<b>Dimensions (mm)</b>	D x H	D x H	D x H
Box	85 x 85	100 x 100	157 x 150
Bottom rail	25,5 x 34,5	26 x 45	38 x 60
Side channels	34 x 48	34 x 48	34 x 48
Fabric roller barrel	ø 63 x 1	ø 78 x 1	ø 100 x 1,5
Maximum	2500 x 1600	4000 x 2700 3000 x 3500	6000 x 3000 or 3000 x 6000
<b>Operation</b>			
Manual	yes	yes	no
Electric	yes	yes	yes
<b>Installation method</b> (see page 10)			
Installation method 1	possible	possible	possible
Installation method 4	possible	possible	not possible
Installation method 5	not possible	possible	possible (limited)

Subject to technical changes.



### Screen headbox

The box is constructed from extruded aluminium (profiles). The aluminium ends of the box have lugs which locate into grooves in the side channels and are fitted with internal plastic brackets which support the roller mechanism. The box is covered by an extruded aluminium rounded front profile which hinges into the cassette profile and can be removed for maintenance and adjustment of the roller mechanism. The hinging point is not visible on the front.

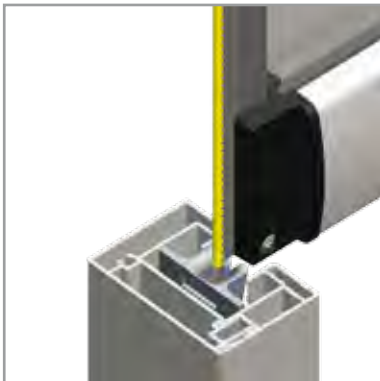
Material: Aluminium extrusion profile, EN AW-6063 T66 alloy  
 Surface treatment: Anodised 20 micron  
 Powdercoating to any RAL colour



### Fabric roller barrel

The grooved roller barrel around which the cloth is rolled is made of galvanised steel with conically shaped endpieces in order to compensate for the thicker ends of the rolled up zip.

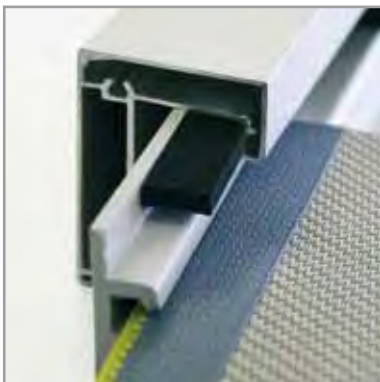
Material: Galvanized Steel



### Bottom rail

The bottom rail is made of extruded aluminium and is strengthened by a round bar made of galvanised steel fully concealed within the bottom rail. This bar is covered with PE foam to prevent contact between aluminium and steel. To ensure a perfect fit against the sill, the bottom rail is fitted with a plastic sealing profile.

Material: Aluminium extrusion profile ENAW-6063 T66 alloy  
 Surface treatment: Anodised 20 micron  
 Powdercoating to any RAL colour



### Side channels

The side channels have an external and an internal guide. The external guide (34 x 48 mm) consists of two parts both of which are extruded aluminium. These guides can be screwed directly to solid grounds. The fixing screws cannot be seen from the front.

The internal guide is made of High Impact Plastic and is fitted with neoprene buffers (60 mm long) to cushion the fabric when there are gusts of wind.

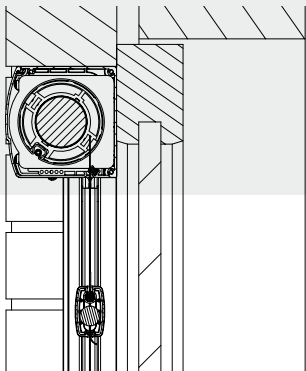
Material of external guide: Aluminium extrusion profile ENAW-6063 T66 alloy  
 Surface treatment: Anodised 20 micron and  
 Powder coating to any RAL colour

## INSTALLATION

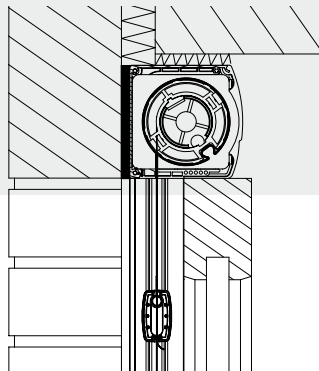
FIXSCREEN® has been developed to offer flexible installation options. The box is self-supporting and is installed on the side channels.

This system can be installed in three ways:

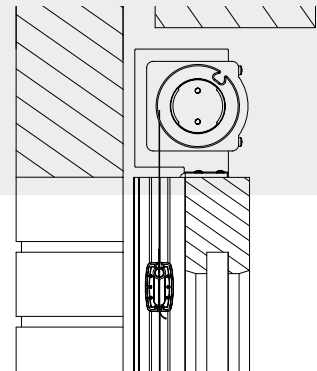
**METHOD 1**  
Outside installation



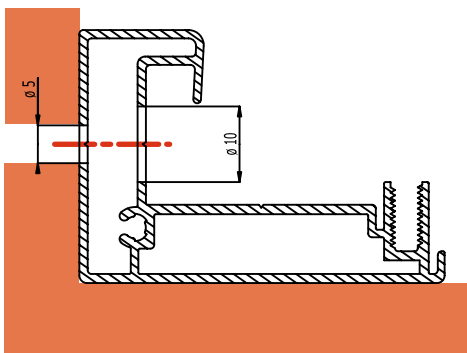
**METHOD 4**  
Inside installation, built-in type with box (with or without front cover)



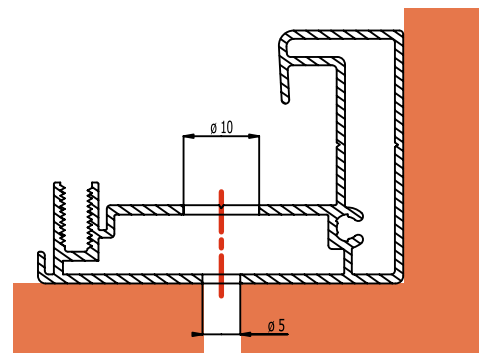
**METHOD 5**  
Inside installation, built-in type without box, with brackets



The side channels are secured by means of screws which are hidden from view when the aluminium guide is closed. The side channels can be secured at the front as well as at the side.



Fixing at the front



Fixing at the side

**FIXSCREEN® REFERENCES**

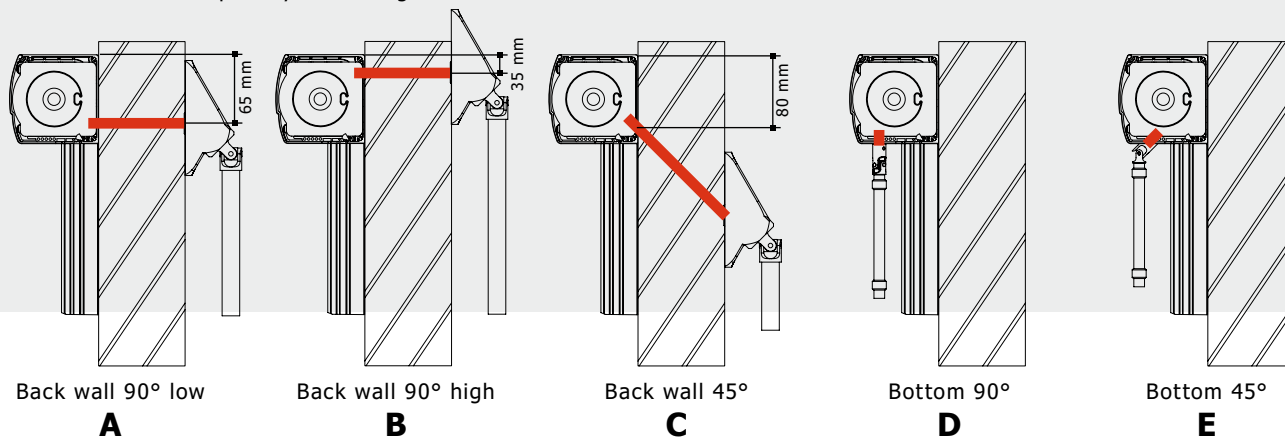


Installation by Meeussen (horren.be)

## METHODS OF OPERATION

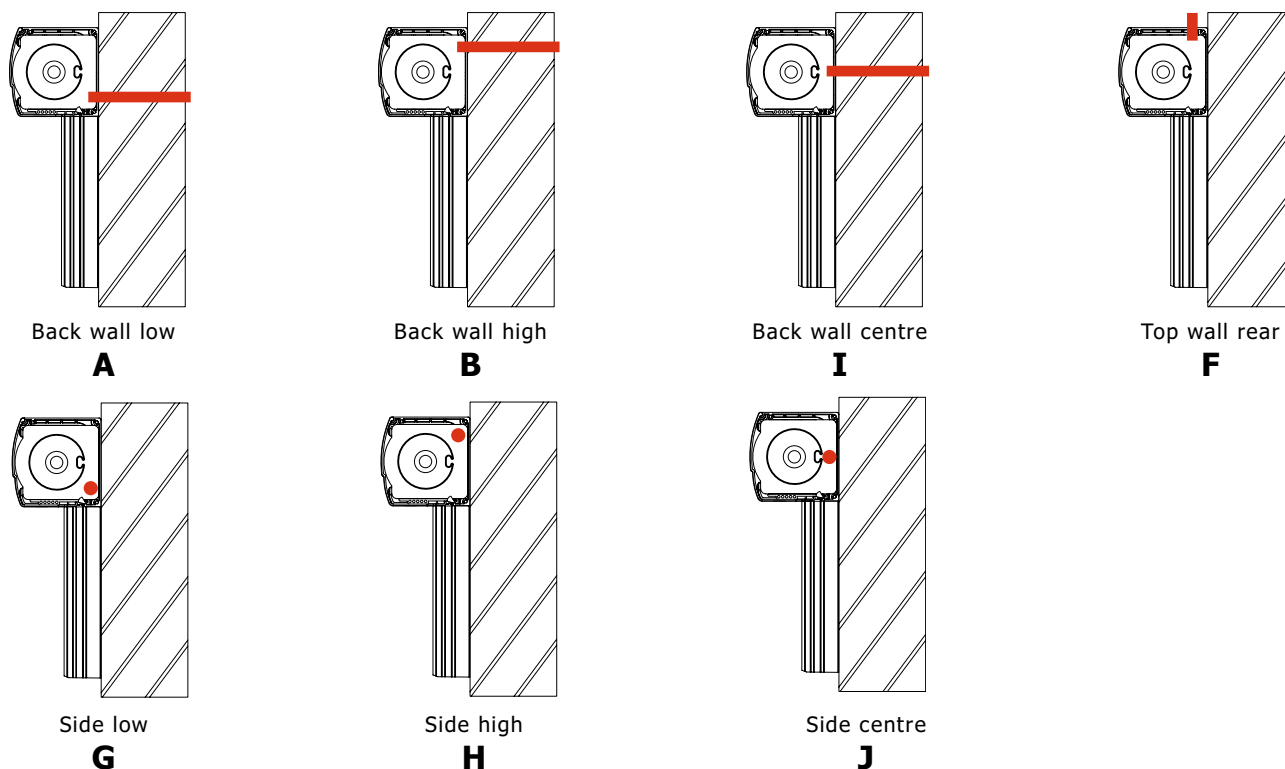
### Manual operation

This is achieved via a crank operated gearbox concealed within the headbox of the system. It is constructed of zamak alloy and operated by an extruded aluminium winding handle. The winding handle can be permanently fixed to the gearbox or detachable via a simple bayonet fitting.



### Electrical operation

Electrically operated roller blinds use a 230 V AC single phase tubular motor concealed within the roller barrel. Electrically operated screens do not have a manual override. There are an extensive range of wired and wireless (radio-control) control options available for individual screens, groups or master control. Linking to environmental sensors or building management systems is also possible. The connection forms part of the sun blind package. Power supply and wiring form part of the electrical package.



Fixed crank



The electrical contract work includes the necessary power connections up to the relay boxes using a wiring lay-out specified by the supplier. Wires will run between the relays and each motor, the control switches and equipment as well as the measuring instruments. The electrician will also install a distribution box in which the manufacturer of the sun protecting screen can also directly connect the motor cable (3 m) at a later date. If the distance between the relay boxes and the motor is less than 3 m, the motor cable can be connected directly without a distribution box.

**TUBULAR MOTORS WITH AN ELECTRONIC LIMIT SWITCH**

For profiled tubes larger than Ø 50 mm – Type PS

Features:

- Silent operation
- Automatic adjustment to the screen length
- Can be connected in parallel without a cut-off relay
- Torque adjusts optimally to closing
- Can be installed anywhere
- Possible to program the final positions without an installation set

Removable crank



**TUBULAR MOTORS WITH INTEGRAL RECEIVER**

For profiled tubes larger than Ø 50 mm– Type PSF

Features:

- Radio frequency not susceptible to disturbance
- Silent operation
- No complicated connection to the command module
- Easy to program
- Torque adjusts optimally to closing
- Automatic adjustment to the screen length

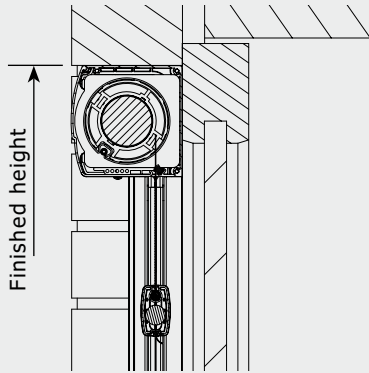
Tubular motor with electronic limit switch



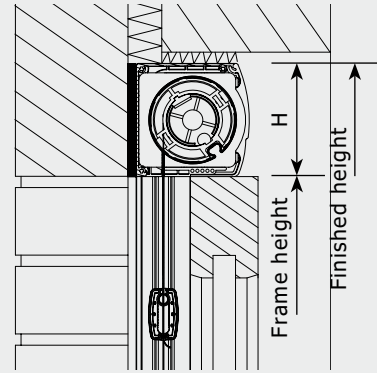
Tubular motor with integral receiver



# TECHNICAL POSSIBILITIES



**METHOD 1**  
Manual operation



**METHOD 4**  
Electrical operation



**METHOD 1**  
Electrical operation



## FIXSCREEN® 85

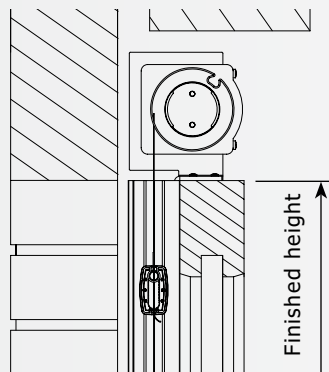
- Installation method 1 (IM 1): outside installation, with manual operation, minimum width from 350 mm, cannot be joined together
- ▲ Installation method 1 (IM 1): outside installation, minimum width from 655 mm, cannot be joined together
- Installation method 4 (IM 4): inside installation, built-in type with box (with or without front cover), minimum width from 655 mm, cannot be joined together

		Width								
m x m		1,00	1,20	1,40	1,60	1,80	2,00	2,20	2,40	2,50
Height	1,00	■▲	■▲	■▲	■▲	■▲	■▲	■▲	■▲	■▲
	1,20	■▲	■▲	■▲	■▲	■▲	■▲	■▲	■▲	■▲
	1,40	■▲	■▲	■▲	■▲	■▲	■▲	■▲	■▲	■▲
	1,60	■▲	■▲	■▲	■▲	■▲	■▲	■▲	■▲	■▲

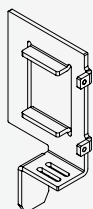
## FIXSCREEN® 100

- Installation method 1 (IM 1): outside installation with manual operation, minimum width from 350 mm, cannot be joined together
- ▲ Installation method 1 (IM 1): outside installation with electrical operation, minimum width from 775 mm, cannot be joined together
- Installation method 4 (IM 4): inside installation, built-in type with box (with or without front cover), minimum width from 775 mm, cannot be joined together
- Installation method 5 (IM 5): inside installation, built-in type without box with brackets, minimum width 775 mm, cannot be joined together

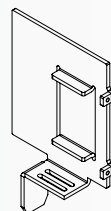
		Width															
m x m		1,00	1,20	1,40	1,60	1,80	2,00	2,20	2,40	2,60	2,80	3,00	3,20	3,40	3,60	3,80	4,00
Height	1,00	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	1,20	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	1,40	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	1,60	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	1,80	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	2,00	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	2,20	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	2,40	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	2,60	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	2,70	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	2,80	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	3,00	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	3,20	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	3,40	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●
	3,50	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●	■▲●



**METHOD 5**  
Electrical operation



Installation brackets, 120 mm



Installation brackets, 150 mm

## FIXSCREEN® 150

- ▲ Installation method 1 (IM 1): outside installation with electrical operation, minimum width 800 mm, cannot be joined together
- Installation method 5 (IM 5): inside installation, built-in type without box with brackets, minimum width 800 mm, cannot be joined together between width: 4000 & 5000 mm: supplementary fixation is required.

		Width																											
		1,00	1,20	1,40	1,60	1,80	2,00	2,20	2,40	2,60	2,80	3,00	3,20	3,40	3,60	3,80	4,00	4,20	4,40	4,60	4,80	5,00	5,20	5,40	5,60	5,80	6,00		
Height	1,00	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	
	1,20	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	1,40	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	1,60	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	1,80	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	2,00	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
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	4,00	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
	4,20	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲
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6,00	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	▲	

Subject to technical changes.

## FABRIC SPECIFICATIONS

### Glass fibre

This screen is woven from strands of glass fibre that have a PVC coating (fire classification M1). A glass fibre screen retains its shape, is unaffected by humidity and heat, and is rot-free and colourfast.

The sides of a finished screen are reinforced with a heat-sealed transparent band that is 9mm wide and 0.3mm thick. The bottom and top have a heat-sealed seam through which a screen cord is threaded. When the height and width exceed 2.70 m the screen will have a horizontal heat-sealed seam.



### Polyester

This type of screen consists of a fine mesh fabric that has a flame retardant PVC coating (fire classification M1/M2, depending on the colour). With this material the warp and weft of the polyester fabric is pre-stretched before and during the coating process to ensure that the material is dimensionally stable and very hard-wearing.



### Black-out glass fibre

This material is only for use with internal blinds and is 100% black-out made from glass fibre strands (42%) with a PVC coating (58%).



### Black-out polyester

This material is only for use with internal blinds and is 100% black-out made from a fine polyester mesh fabric that has a flame retardant PVC coating. The back also has a darkening PVC coating.



For more information please see our brochure "Screen Fabric Types".



Apartments at Diksmuide, Büro II & Architect Gino Weyne



Volvo Garage Diksmuide, Architect Steraan Hoet



## MAINTENANCE

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All FIXSCREEN® are designed to be low maintenance however, the following should be observed to ensure many years of trouble-free use:

- Screens should ideally be retracted when fully dry but if the screen is wet it should be lowered again to dry as soon as weather permits to prevent staining and possible mould growth.
- To clean FIXSCREEN® first use a brush or vacuum cleaner to remove any loose dirt then use a non-abrasive cleaning product and lukewarm water to remove any remaining dirt (special cleaning products can be obtained from the installer). After cleaning, always rinse the screen and do not clean the screen in bright sunlight, as soapy water can dry quickly leaving stains behind on the screen.
- Hinged or rotating parts must be lubricated annually using a dry-film lubricant (Teflon)
- Plastic bearings are to be lubricated with a dry-film lubricant (Teflon). Make sure twigs and leaves are removed beforehand.
- We recommend regular technical inspection of your installation by an approved installer:
  - Annually, in commercial and industrial buildings installations
  - Every 4 years, in the case of sun protection on private dwellings
- Always use original parts from KESTELYN NV (Renson Sunprotection Screens).

## GUARANTEE



We guarantee our products for 5 years against any defects occurring during normal use and maintenance.

PLUS a 7-year warranty is given on the FIXSCREEN® technology\*:

- zip remains in the side channel
- optimal fixation between zip and screen

All materials used by KESTELYN NV (Renson Sunprotection Screens) are high quality and adapted to the purpose of use.

The guarantee includes supplying replacement parts, to be installed in situ by the installer (possibly with the assistance of a technical employee from KESTELYN NV (Renson Sunprotection Screens)) or a complete overhaul of the system by the manufacturer in his own workshops.

The assembly costs (travel + hourly wage) are not covered by this guarantee.

The guarantee period starts from the manufacturing date and only relates to the actual product, and not to its installation.

The guarantee is only valid when the product is used and maintained in accordance with the instructions provided in this manual. In the event of abnormal use, the guarantee becomes invalid. When reporting any problems, please always state the serial number when you contact your installer.

1 January 2005

## EC declaration of conformity

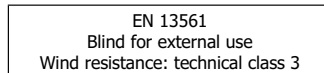
Manufacturer: KESTELYN NV (Renson Sunprotection Screens)  
IZ 1 Flanders Field  
Kalkhoevestraat 45  
B-8790 Waregem  
Belgium

I, the under-signed,  
hereby declare that the product:

"FIXSCREEN®, external sun protection system" and EC specifications:



is in conformity with appendix ZA.1 of the European Standard EN13561:2004



Paul Renson,

Managing Director

## RENSON - YOUR PARTNER FOR VENTILATION AND SOLAR SHADING

RENSON, WITH ITS RICH TRADITION IN INNOVATION AND EXPERIENCE SINCE 1909, IS PROFILING ITSELF AS THE UNDISPUTED EUROPEAN MARKET LEADER IN NATURAL VENTILATION AND SOLAR SHADING. OUR HEADQUARTERS ARE LOCATED IN A REMARKABLE BUILDING IN WAREGEM (BELGIUM). THE BUILDING IS A WORKING EXAMPLE OF OUR HEALTHY BUILDING CONCEPT AND FUNCTIONS AS A PROTOTYPE, EXHIBITING OUR TECHNOLOGICAL STRENGTHS.

RENSON'S MISSION IS THE ONGOING DEVELOPMENT, PRODUCTION AND SELLING OF UNIQUE AND INNOVATING PRODUCTS FOR NATURAL VENTILATION AND SOLAR SHADING. OUR MAIN OBJECTIVE IS TO IMPROVE THE LIVING CONDITIONS OF PEOPLE AND AT THE SAME TIME CUT ENERGY COSTS. OUR SYSTEMS ARE ENVIRONMENTALLY FRIENDLY; SOUND ABSORBING AND GOOD FOR THE HEALTH OF ALL ITS USERS.

### RENSON HAS IT ALL :

- Our multidisciplinary R&D department is co-operating with leading European research organizations. The result of that is a complete range of innovative concepts and products.
- Our automatic powder coating installation, anodisation unit, moulding centre, plastic injection moulding facilities, assembly department and warehouse are all accommodated within an area of 75,000m<sup>2</sup>. This degree of vertical integration allows RENSON to ensure the quality consistency of its products.
- RENSON's headquarters, sales and marketing department and production plant are located in Belgium, but we also have plants and offices in France and in the UK. RENSON has sales representatives active all over Europe and has set up a network of distributors throughout the world.
- The diversity and capability of our staff are our warranty for correct solutions for each individual building project. The creation of constructive long term relationships with construction specialists is our priority.



RENSON Headquarters (BE)



RENSON Headquarters (BE)



RENSON LTD (UK) Maidstone

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Conditional technical changes • The most recent edition of the brochure can be downloaded on [www.renson.eu](http://www.renson.eu)

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 **RENSON**  
DESIGN IN SUNPROTECTION