

# Specifications

## SolidScreen® 105

ZIP screen



## GENERAL



### Description

The SolidScreen 105 is a vertical screen that covers the entire surface of the glass, to prevent invasion of obtrusive light and heating of the glass surface and underlying areas. One of the most remarkable features of this screen is the wind resistance. The system has been successfully tested at wind speeds up to 145 km/h (12 Beaufort) and has achieved the highest class in TÜV tests on lifespan and wind load. This makes the SolidScreen extremely suitable for high-rise use.

The screen fabric has a zipper on both sides. A plastic inlay funnel (in the aluminium guides) ensures that the zipper runs smooth into the PVC guide. Thanks to the zipper system the fabric is tight and unwrinkled. Through this application, the screen also serves as an insect screen.

### Installation

This system can be installed in different ways:

- On the frame inside or outside.
- On the wall.

### Application

- For all window types: PVC, aluminium and wood
- For both new construction and renovation
- Both indoors and outdoors
- Private housing
- Projects: Hospitals, care homes, offices, schools, government buildings.

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### Dimension

The SolidScreen 105 has a maximum fabric surface of 12,0 m<sup>2</sup>.

The SolidScreen 105 has a maximum width of 4,0 m and a maximum height of 3,5 m.

### Housing

The 2-part head box is 105 mm wide and 105 mm high. Both profiles are manufactured from extruded aluminium. The sides of the head box have aluminium top cover supports which support the retractor.

The top cover supports are equipped with legs to mount the unit on the guides. There can be selected for a slanted with lip or a round head box.

### Side guides

These profiles are manufactured from extruded aluminium. The profiles are screwed onto the construction. The side guide is provided with a nylon zipper guide which includes neoprene strips to absorb the gusts of wind.

### Bottom slat

This profile is manufactured from extruded aluminium and reinforced with a steel reinforcement bar. This steel reinforcement bar can be covered with PE-foam, for suppression of impact sound between bar and the bottom slat.

### Colour

All visible aluminium profiles (cover, guides and bottom slat) can be powder coated in the desired RAL-colour or anodized.

### Roller tube

The fabric roller Ø 78 with sleeve and thickness ± 1,25 mm is made of galvanized steel.

### Assembly

All fasteners are made of stainless steel class A2.

### Control

- Electric: Powered by a 230 VAC tubular motor, CE approved.

Control by a switch or remote control, supplemented with a sun and wind sensor, for optimal convenience and energy savings. The electric control can also be linked to operate several screens with one switch.

Generally the connection is done by the fitter / electro-technical engineer.  
Power supply and all wiring belong to the electro-technical installation.



## FABRIC

A screen fabric is what makes a screen so special. Without a screen fabric, there is no protection against the sun and no insulation. A closed screen covers the entire glass surface. This prevents unwanted light penetration and heating of the room behind it. The most striking and distinctive property of a Tibelly screen fabric is that during the day you can look out from inside, but no-one can look in from outside.

### Colour

There are two types of screen fabric: Sergé and ecole1%. One could choose from as many as 48 colours.

### GENERAL CHARACTERISTICS

Screen fabric is woven from glass fibre thread and polyester yarn, with a PVC coating. As a result, the fabric has a somewhat open structure. The extremely strong coated yarns have a very long lifespan.

### Weighted composition

Fiberglass: 41,5%

Polyester yarn with PVC coating: 58,5%

### Cleaning

The fabric can easily be cleaned with lukewarm water, mild detergent and a soft brush.

#### Technical specification

##### Tibelly Screen fabric Sergé

Yarn	
Titer	165 tex
Fabric	
Openness factor	3 %
Thickness	0,8 mm
Mass	544 g/m <sup>2</sup>
Warp/weft/dr/cm	18/14
Fire resistance	
C-s3, d0:	EN 13501-1 (2010)
M1:	France
FR:	U.S.A.
B1:	Germany
Colour fastness	
Min. 7	(ISO 105 B02)
Air porosity	
1030 L/m <sup>2</sup> /sec	
Tear resistance	
Warp 9,5 daN	Weft 10 daN

#### Technical specification

##### Tibelly Screen fabric ecole1%

Yarn	
Titer	165 tex
Fabric	
Openness factor	1 %
Thickness	0,6 mm
Mass	474 g/m <sup>2</sup>
Warp/weft/dr/cm	18/10
Fire resistance	
C-s3, d0:	EN 13501-1(2010)
M1:	France
FR:	U.S.A.
B1:	Germany
Colour fastness	
Min. 6	(ISO 105 B02)
Air porosity	
374 L/m <sup>2</sup> /sec	
Tear resistance	
Warp 9,5 daN	Weft 10 daN

## TÜV CERTIFICATION

We set great store by quality. All our exterior sun protection products are compliant with the CE standards and, since the year 2000, have been subjected to extensive testing by the TÜV Nord Group. This is carried out in accordance with the DIN EN 13561:2017-01 standard.

Our screens are tested on the basis of two criteria:

- Lifespan class
- Wind resistance class


### Lifespan class according DIN EN 13561:2017-01

Lifespan expresses the number of extension and retraction movements that a sun protection product can withstand. The overview below indicates the various classes applicable in accordance with the EN 13561:2017-01 standard.

Number of movements	Class 3	
Open and closed	10.000	

### Wind resistance class according DIN EN 1932:2013-09

Wind load is the maximum force of the wind which an opened sun protection product can withstand. The overview below indicates the various wind resistance classes.

Wind resistance class	Class 4	
Beaufort scale	7	
V (km/h) (maximum)	61 km/h	
V (m/s) (maximum)	17 m/s	
Nominal test pressure p (N/m <sup>2</sup> )	170	
Safety test pressure 1,2 p (N/m <sup>2</sup> )	204	



**\*\* ATTENTION \*\***

The AVZ-Group accepts no liability for any errors in these specifications,  
or for any damage or losses resulting from the use thereof.