

# SL20A

## Technical specification

The ScreenLine® venetian blind SL20A designed for use in double-glazed units, is manufactured in accordance with high technical specifications and production standards. The slat tilting function is achieved using a rotational magnetic transmission through the glass thereby guaranteeing the unit's hermetic seal. The external magnet, fixed to the internal glass by double-sided high performance adhesive allows perfect alignment with the internal magnet. The tilting operation is achieved using a continuous cord loop that drives the external magnet. The cord is held lightly under tension by a cord tensioner on the glass directly below the external magnet. The blind bottom rail is kept at the bottom by means of two pins located in the side guides.

### Technical features

#### Magnetic drive components

Fibreglass re-inforced nylon 66 casing. Transmission gears and parts manufactured from carbon-nitride steel. Ball bearing support for both magnets and gears.

Neodymium-Iron-Boron magnets with the following technical features:

Energy produced	Bh max-Mg.Oe	33-35
Residual induction	Br-Gauss	11.000 / 12.000
Coercive force	Hc-Oestered	10.000
Maximum working temperature	°C	120
Curie temperature	°C	310
Reversible temperature factor	°C	-0.12%

#### Head rail

Extruded aluminium, A6063S-T5 alloy. Dimensions: width 18 mm, height 40 mm with pelmet. Closing profile in anodised aluminium, with acrylic high performance double-adhesive tape.

Anodised or powder-painted in the same colour as the slats' or in RAL paint on request.

**Slat**

Aluminium, AA 6011-T8 alloy. Dimensions: width 12.5 mm, thickness 0.2 mm.

High-resistance polyester paint. Available colours: five.

The slat have a special Clarion® treatment designed to eliminate possible emissions of chemical products inside the double-glazed unit, when exposed to ultraviolet and heat radiation i.e. non-fogging.

**Bottom rail**

Extruded aluminium A6063S-T5 alloy. Dimensions: width 14 mm, height 11 mm.

Anodised or powder-painted in the same colour as the slats' or in RAL paint on request.

Manufactured in two matched profiles.

**Side guide**

Extruded aluminium A6063S-T5 alloy. Sizes: 20 x 9 mm.

Anodised, with breather holes and acrylic high performance double-sided adhesive tape.

**Ladder**

Thermo-fixed 100% polyester. 10 mm pitch. Excellent size and colour stability to UV rays. Treated to avoid any possible emissions of chemical products inside the double-glazed unit, exposed to ultraviolet rays and heat. Same colours as slats'.

**Cords**

Thermo-fixed 100% polyester with internal core. Excellent dimensional stability.

White internal cord, 1.0 mm diameter; light grey external cord, 4 mm diameter.

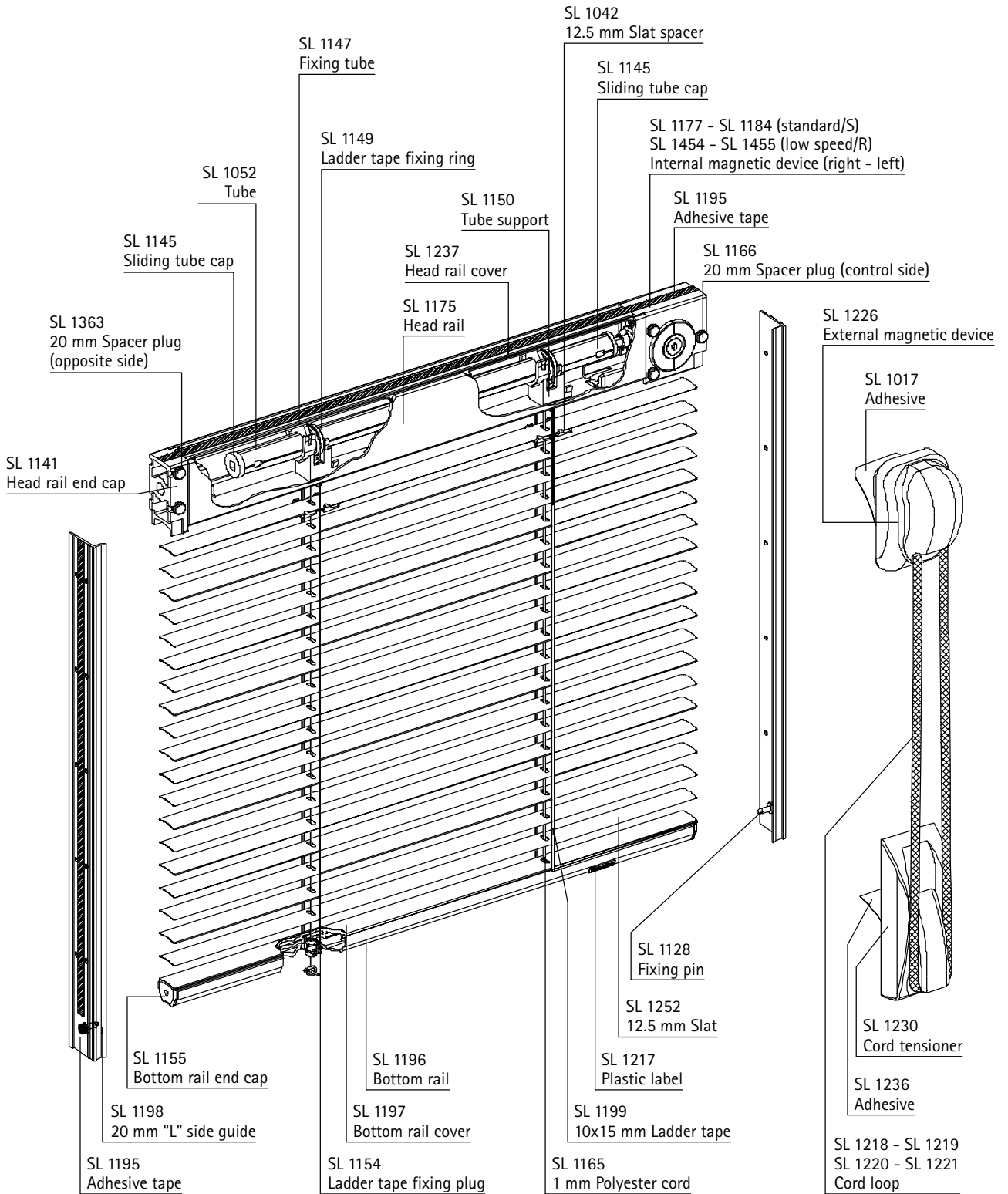
**Spacer bar**

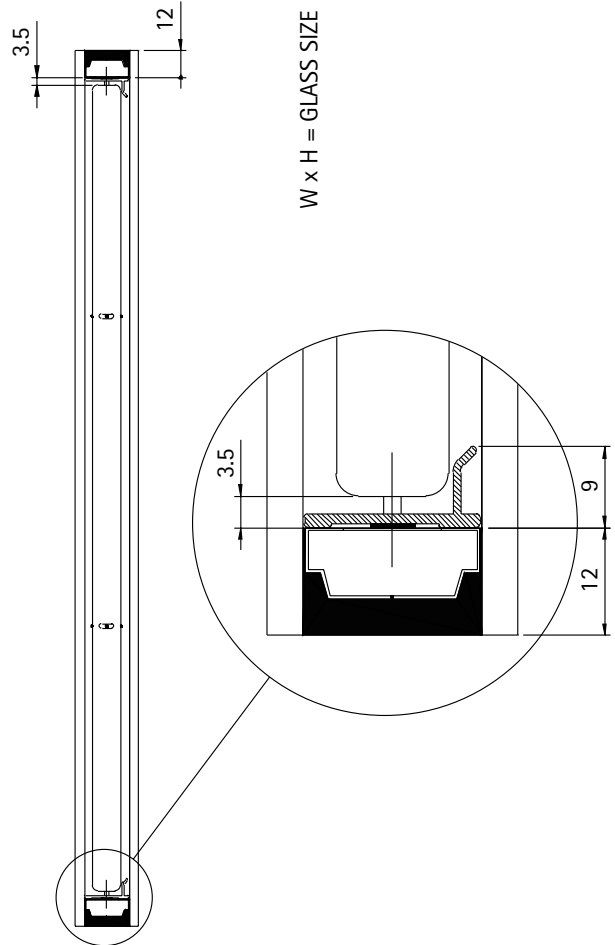
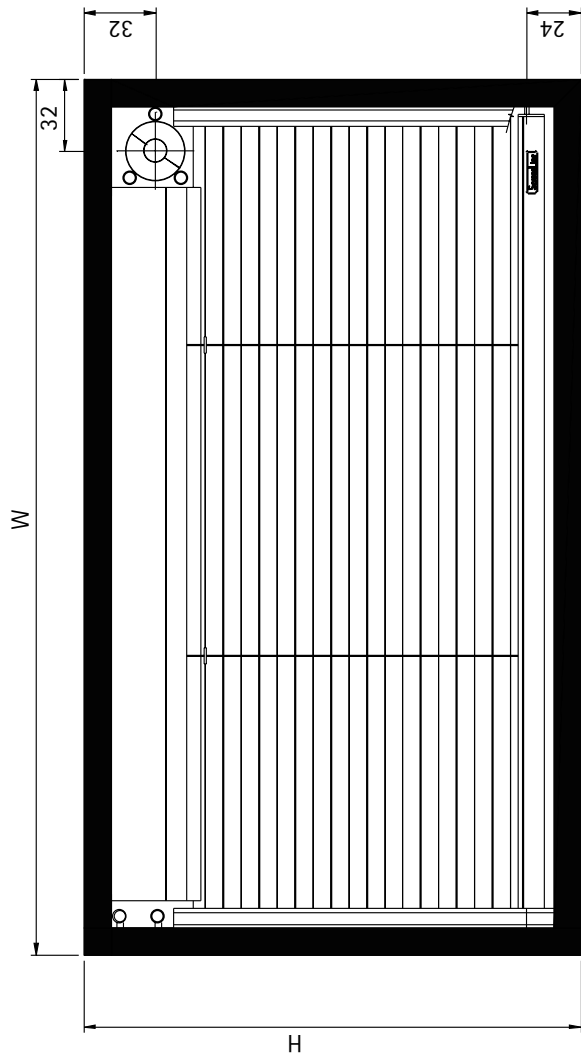
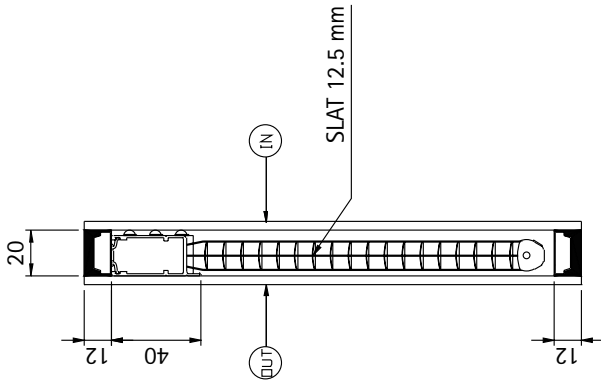
Electro-welded aluminium. Dimensions: 20 x 8 mm, or 22 x 8 mm.

**Double-glazed unit size range**

Height	100~3.000 mm
Width	250~2.000 mm
Maximum area	see feasibility tables

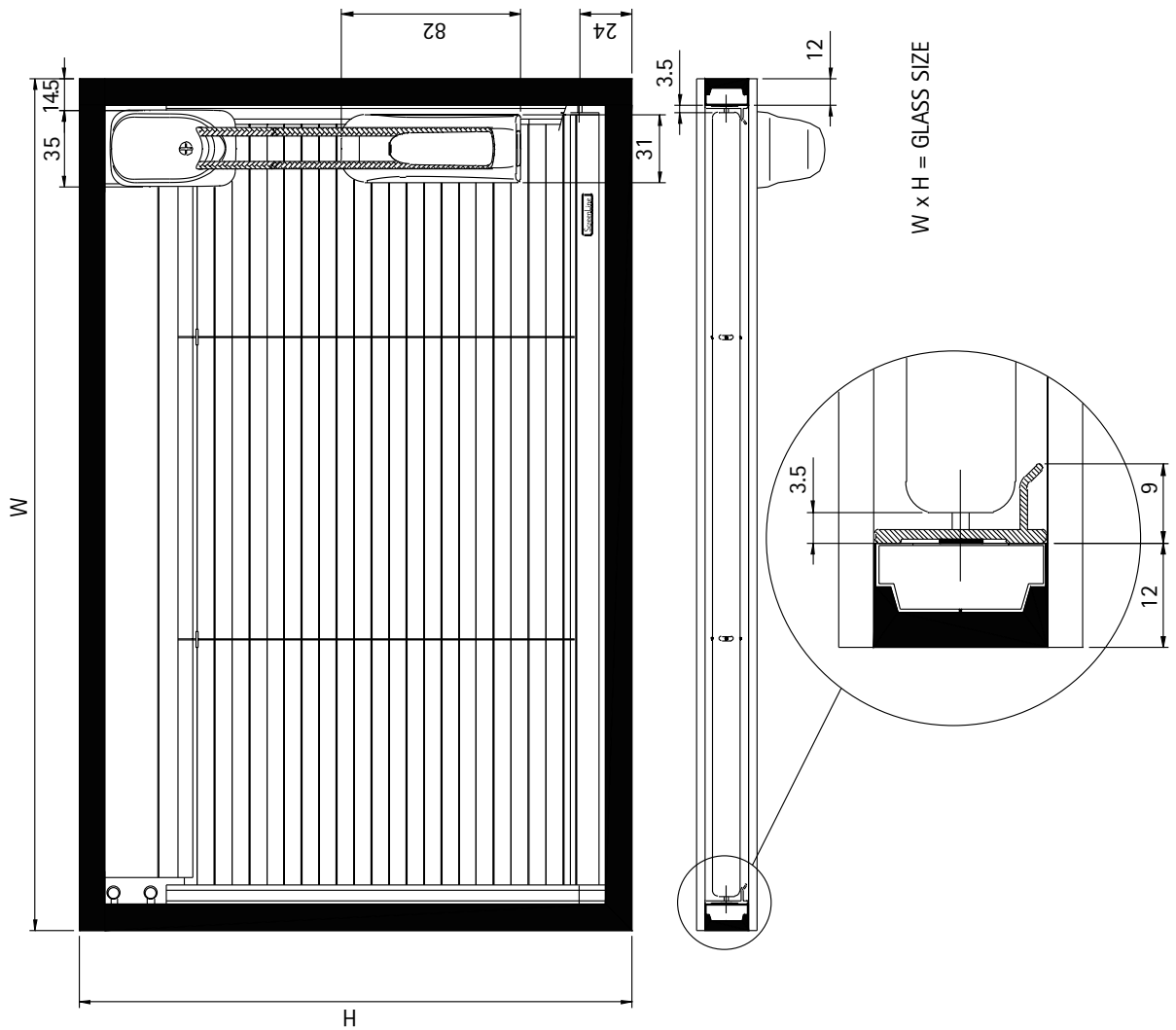
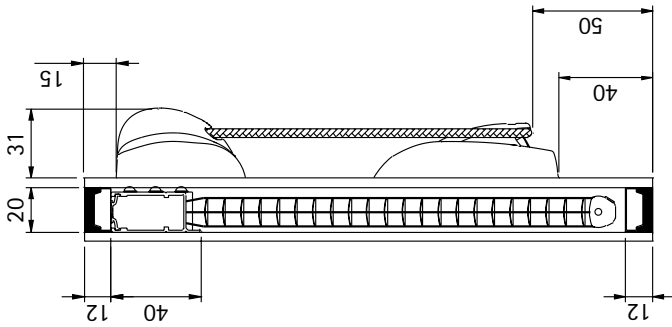
# SL20A Comprehensive drawing with component codes





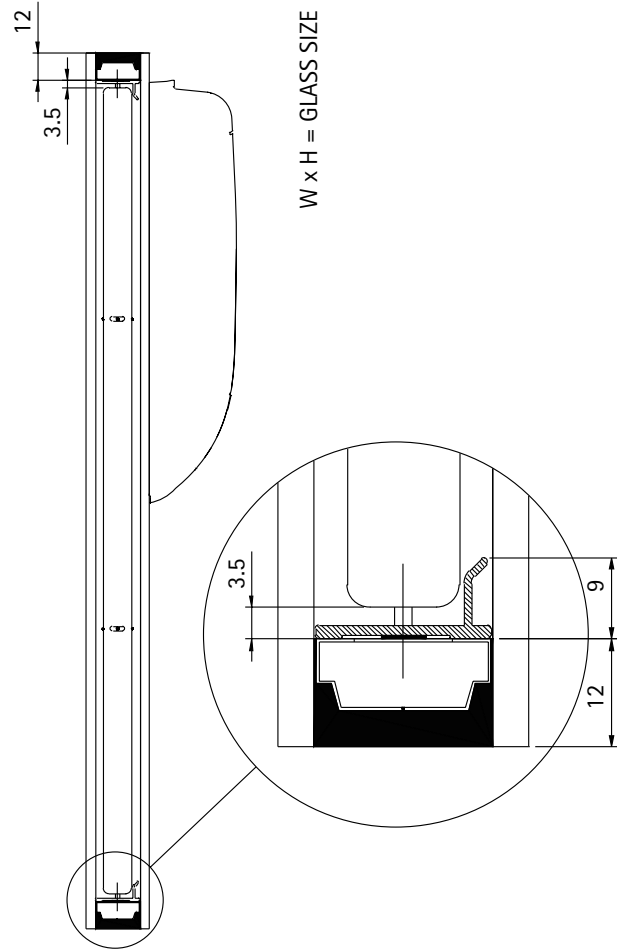
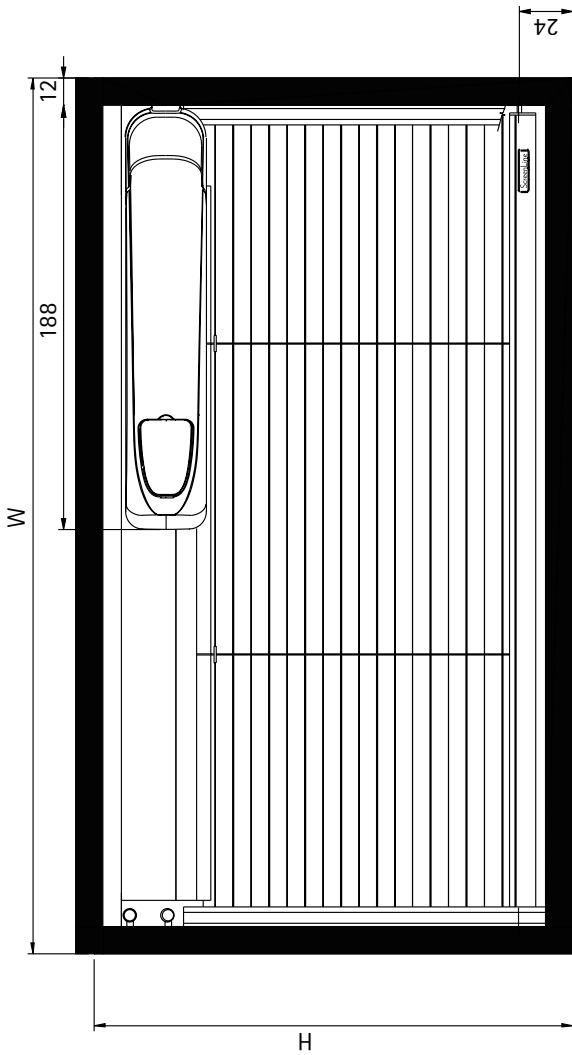
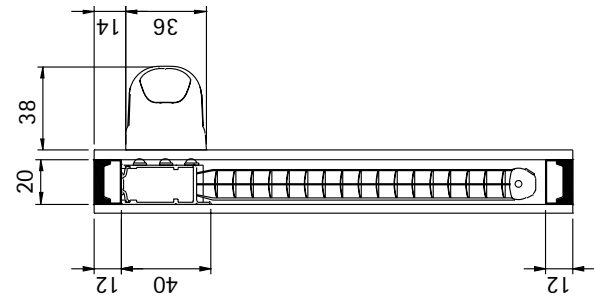
W x H = GLASS SIZE

# SL20A Double-glazed unit with cord operation



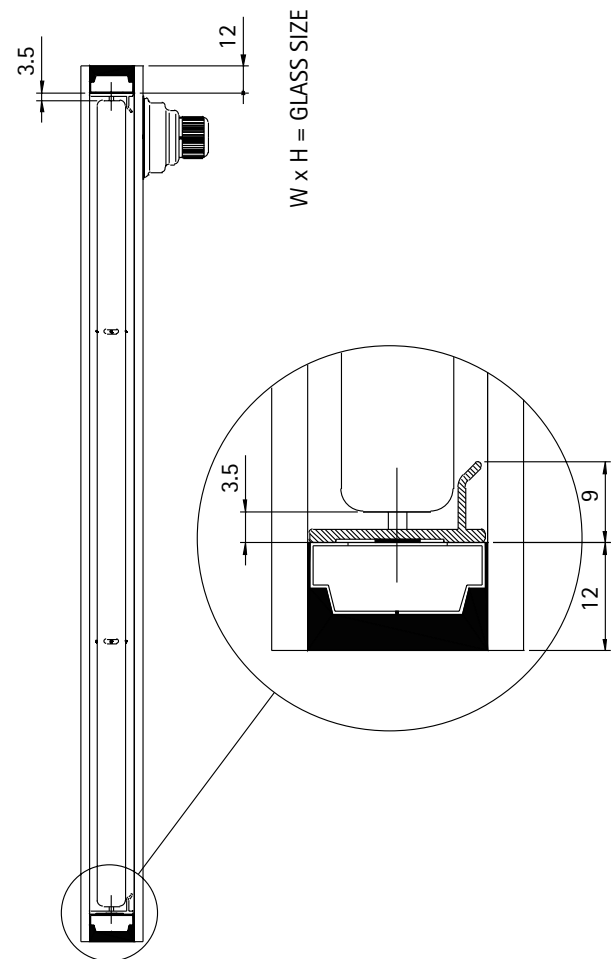
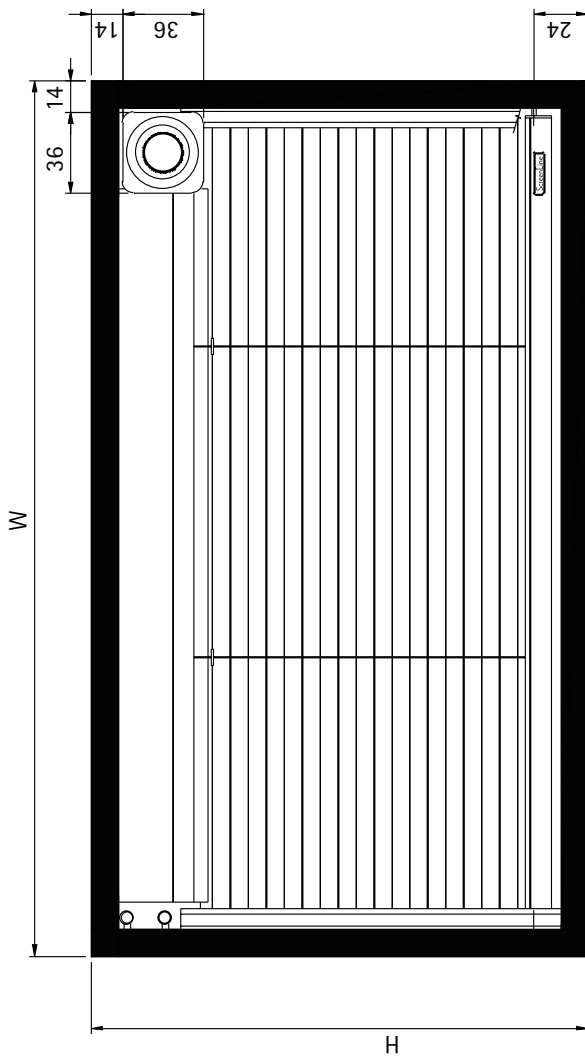
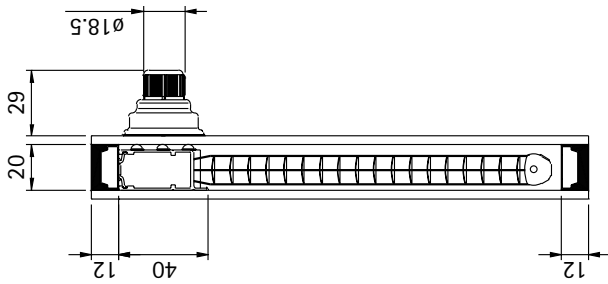
# Double-glazed unit with external motor

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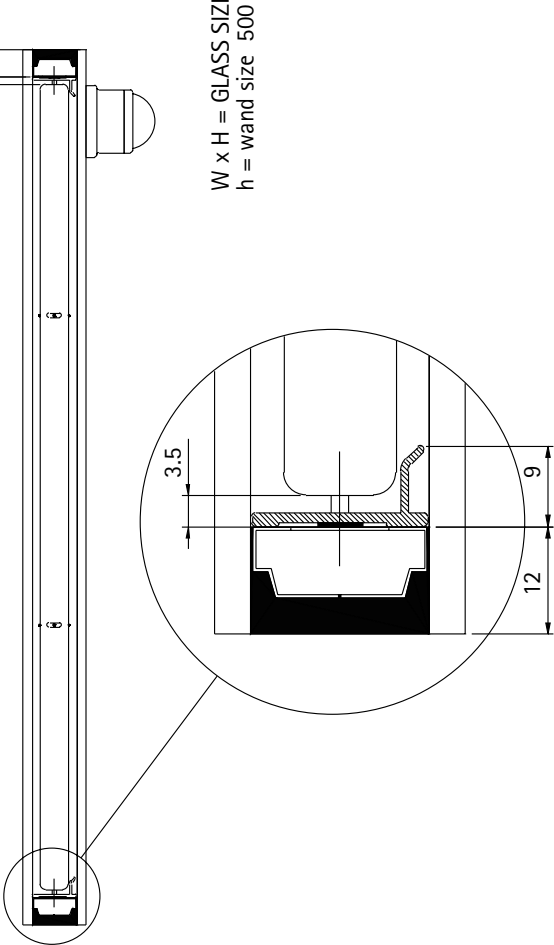
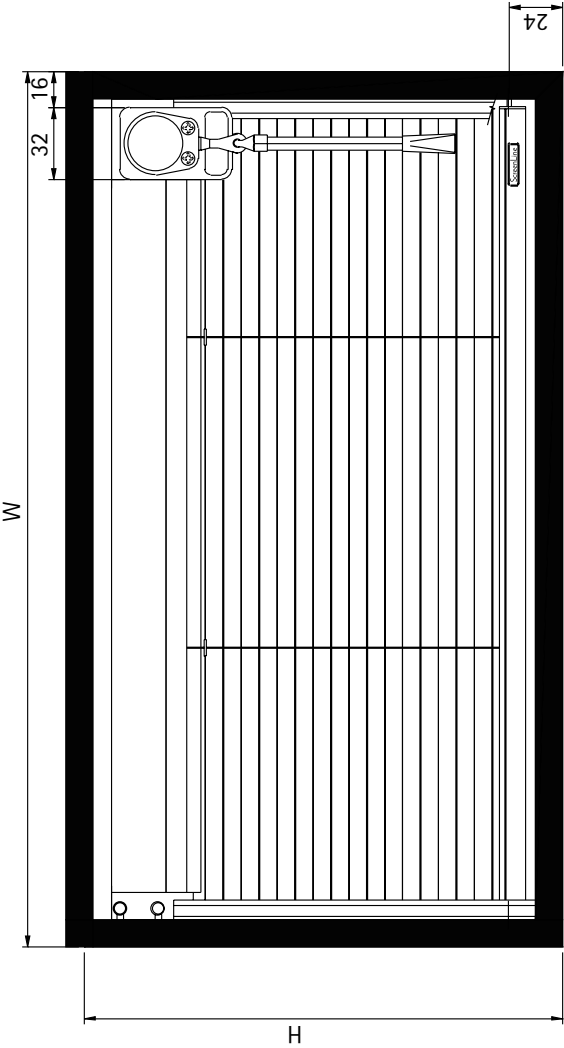
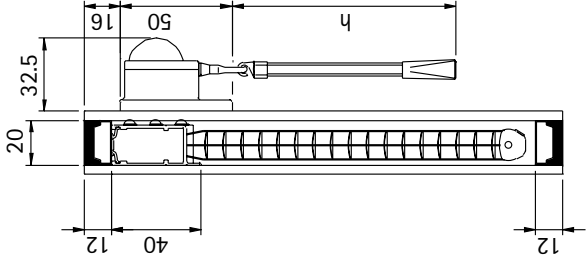
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Double-glazed unit with knob operation



Double-glazed unit with wand operation

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W x H = GLASS SIZE  
h = wand size 500 1000 1500 2000



# Feasibility • glass thickness 10mm (monolithic)

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Height	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200				
30	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S		
40	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
50	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	
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90	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
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110	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
120	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
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Out of warranty

Not-feasible

Reduced System

Standard System

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Height	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200			
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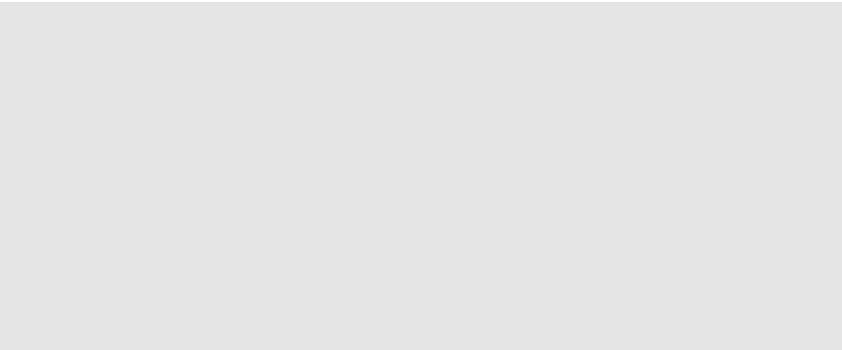
Standard System     
  Reduced System     
  Not-feasible     
  Out of warranty

# Feasibility • glass thickness 13mm (laminated 6+6 mm)

# SL20A

Height	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	105	110	115	120	125	130	135	140	145	150	155	160	165	170	175	180	185	190	195	200	
30	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
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110	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
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160	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
170	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
180	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
190	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
200	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
210	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
220	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
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250	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
260	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S
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300	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S	S

Standard System    
  Reduced System    
  Not-feasible    
  Out of warranty

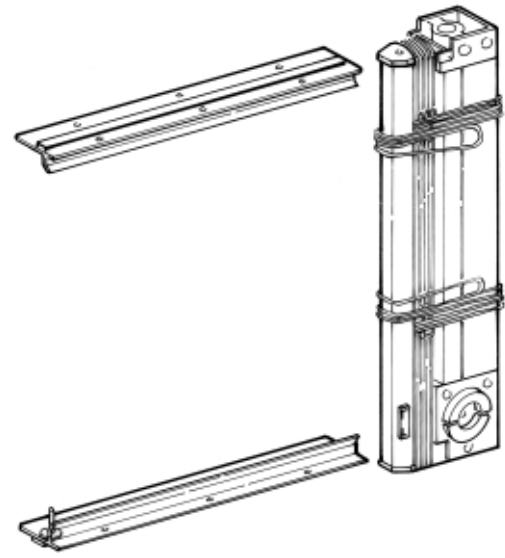


## ScreenLine® kit components

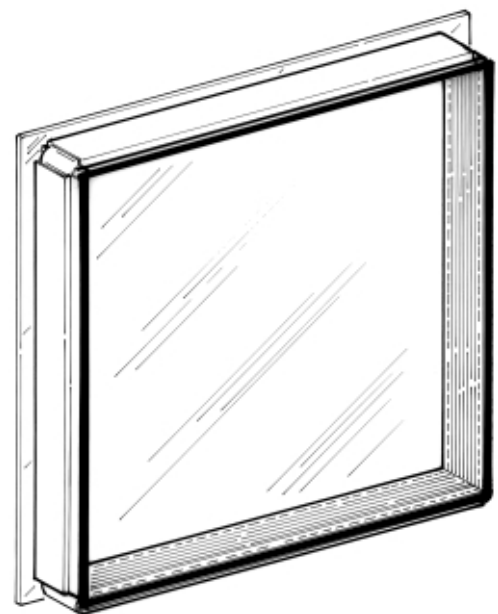
When the goods are delivered, please check the integrity of the package and confirm that the components are as the Purchase Order.

The elements of the kit **A** should comprise:

- venetian blind with adhesive tape on the head rail
- L-channel side guides with adhesive tape and fixing pins for the bottom rail
- external magnetic control plus cord with cord tensioner, both with adhesive tape
- spacer bars and corner keys – on request.

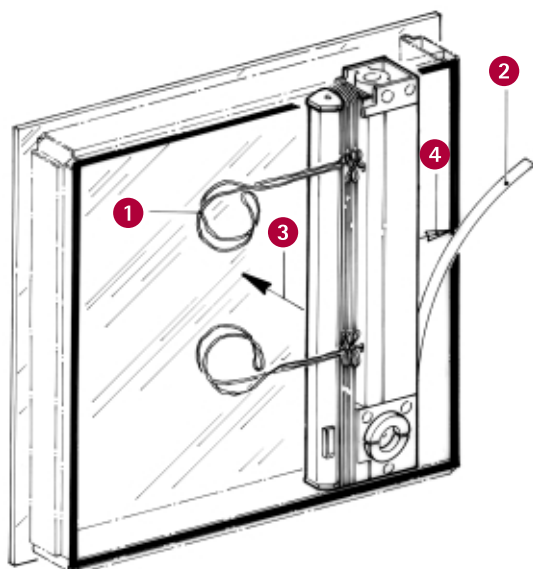


**A** Kit



**B** Spacer bar – glass assembly

## Assembly of the integral blind unit



**C** Blind insertion

### Spacer bars preparation

Fill the spacer bars with required amount of molecular sieve and hot extrude the butyl on them in a continuous line. (See Manufacturer's quality scheme, page 38). If you use your own spacer bar, check their size. The blind head rail, as well as the side guides must be inserted inside them with a maximum 1 mm variation.

### Line assembly

Pass the first glass through the glass either on its base or height.

Position the spacer frame uniformly on the glass ensuring it is perfectly parallel and square (avoid inwards deflection of the spacer bar) and press to obtain a high degree of adhesion. **B**

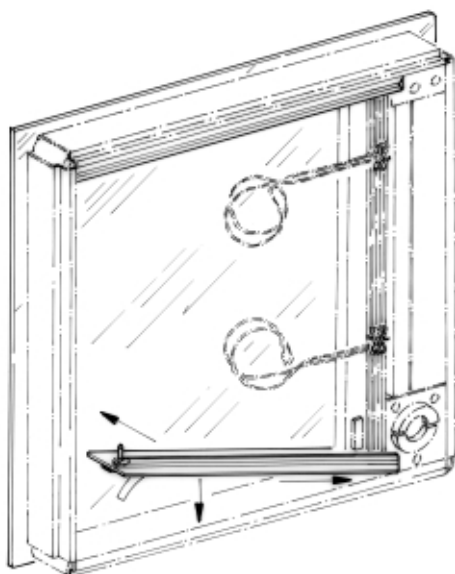
Remove the blind from its plastic package, undo the cords from around it without tangling them. Leave the blind raised and pay attention not to lose the pins around the internal magnet. **C1**

Remove the protective film from the double-adhesive tape on the head rail. **C2**

Stick the head rail to the respective spacer bar and press together to obtained good adhesion). **C4** Use the glass as a guide / support. **C3** During this operation make sure that the internal magnet faces the inside surface of the inner glass. Leave the blind raised and standing vertically on the spacer bar.

Place the L shaped side guides inside the appropriate cavities at the ends of the head rail, using the glass as a check level. It is recommended to place the lower guide first, as it becomes a support for the blind slats. After inserting this guide in the cavity, remove the protective film and fix it to the spacer bar, avoiding any inwards flexures. **D**

Unpack the blind and let it slide along the guide **E1** avoiding damage or contamination of the slats. Insert the blind bottom rail onto the pin located at the end of the guide. **E2**



**D** First side guide insertion

Place the upper L-shaped side guide into its head-rail socket, paying attention to keep the blind slats on the same side. **F1**

Insert the bottom rail in the pin of this last guide. **F4**

Remove the double-adhesive film and stick it to the corresponding spacer bar. **F1** During this operation avoid bending the guide towards the internal side of the glass. **F6**

The side guide fin must face the internal magnet (except for the SL22 system). Make sure that all the slats face the external glass with their convex side.

Now assemble the second glass.

### Gas filling

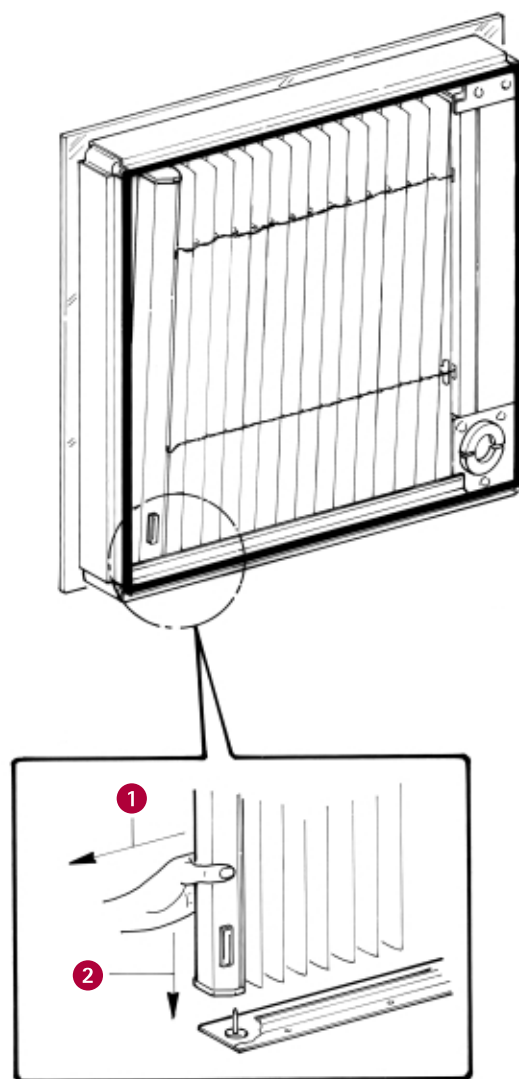
Using the appropriate equipment and following the requisite procedure replace the internal air with argon.

### Testing

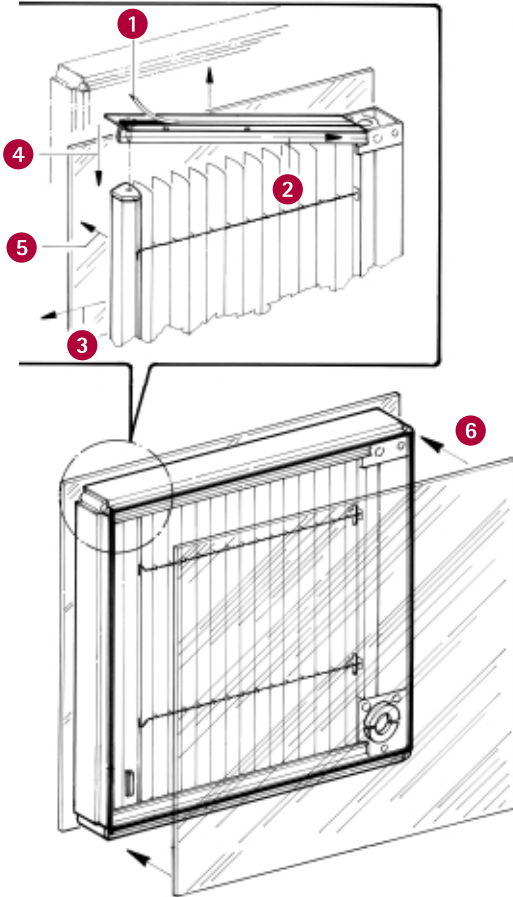
Prior to sealing the perimeter, position the unit vertically with the blind at the top and test the blind using the cord operated external magnetic device. During this operation check that the distance between the slats and guides is even.

### Second sealing

Tilt the blind slats to the open position and seal the perimeter following the Manufacturer's quality scheme (page 38). **G**



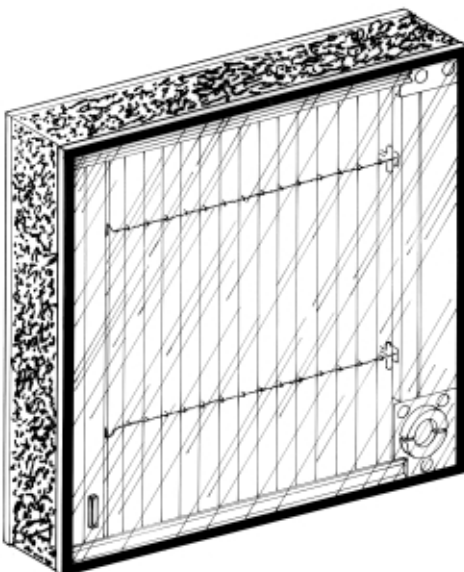
**E** Blind opening



**F** Second side guide insertion  
Second glass assembly

#### Note

1. It is not advisable for tilt only systems to be turned upside
2. The external magnet and cord tensioner should only be applied to the glass surface after glazing. Please ensure the glass surface is cleaned correctly to obtain good adhesion.
3. The use of the stainless steel base plate allows greater accuracy when locating the external magnet over the internal magnet in order to achieve perfect alignment. During this operation ensure the glass is clean.



**G** Final seal