Kvadrat Soft Cells
Installation guide

Index

version 2018.01.31

kvadrat soft cells

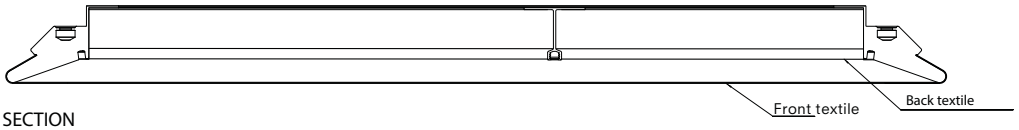
Introduction

Kvadrat Soft Cells are patented panels that control sound absorption. Their design is based on an innovative, aluminium frame, with a concealed tensioning mechanism that keeps the surface of the fabric perfectly stretched. They create an aesthetic environment with excellent acoustic properties.

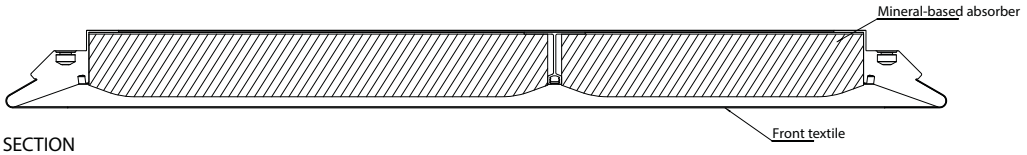
Soft Cells have been developed to offer modular and flexible solutions for diverse interior requirements. Primarily used as building components, they are also suitable for post-fitting. The frames are customized and can be manufactured in large sizes and in most shapes.

They are easy to install, and can be easily be taken down, reassembled and reupholstered to meet changing requirements. When installed by Kvadrat's White Glove Installers, they come with a 10-year guarantee.

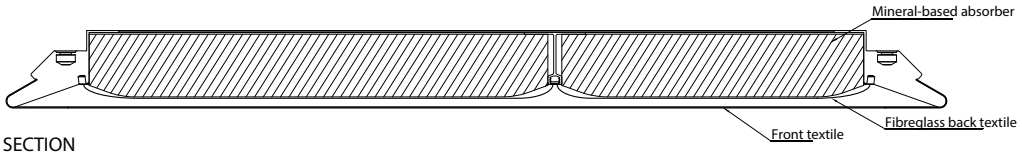
Soft Cells, models



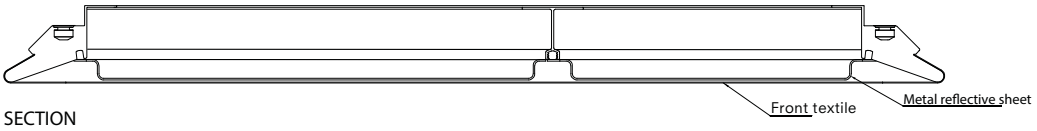
SECTION
Soft Cells Standard



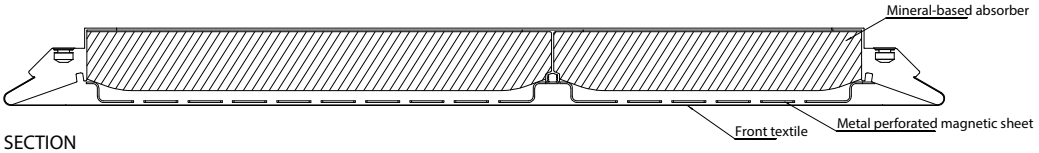
SECTION
Soft Cells Broadline



SECTION
Soft Cells Lowtone



SECTION
Soft Cells Reflective



SECTION
Soft Cells Magnetic

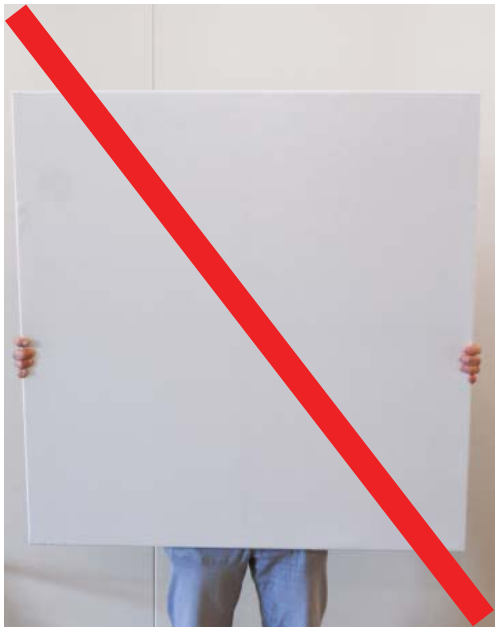
Handling instruction

1. Make sure to work on a clean and flat surface.
2. Read the installation guide prior to installation
3. Refer to the labels that are on all the Soft Cells
4. Do not unwrap Soft Cells before the site is clean
5. Never place Softcells on the corners

6. Handle panels using cardboards covers

7. Store panels upright, place front against front and back against back

8. Use white gloves for handling unpacked panels



9. Sort panels according to size

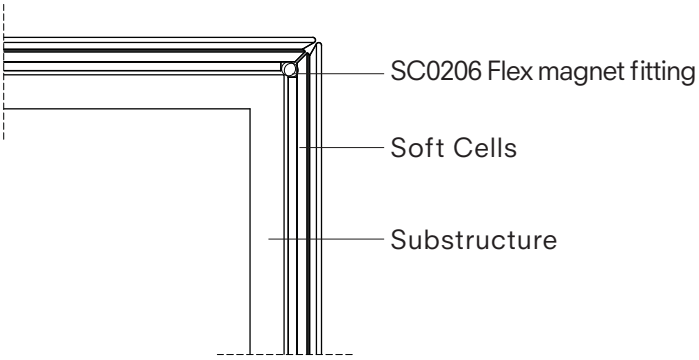
General guidelines

Kvadrat Soft Cells are designed for wall and ceiling mounting.

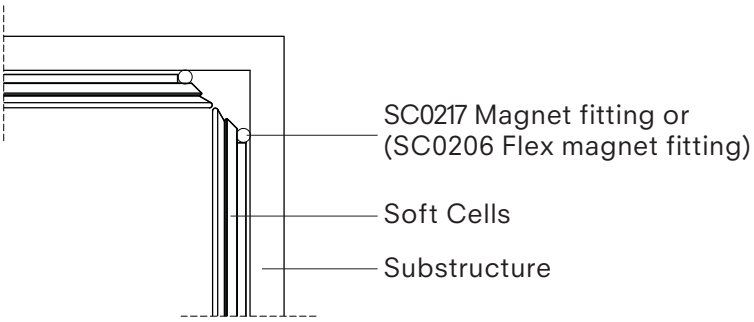
Generally fittings are installed into a groove on the back of the frame profile with a rhombus-shaped steel nut. The steel nut comes with a shape that makes it slide into position once placed in the groove and tightened.

When untightened, easily adjust the position of the fitting and steel nut along the frame profile

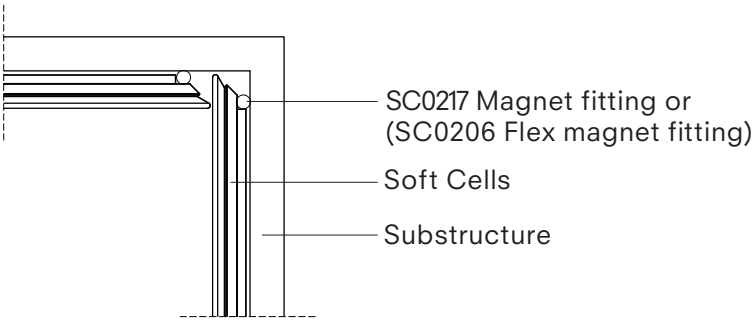
Please observe the different corner installations here below



External corner installation



Internal corner installation 1



Internal corner installation 2

Soft Cells fitting matrix

SC model and variations	Magnet		Wire		Hinge/push latch		Flex magnet		Safety wire^	
	wall	ceiling	wall	ceiling	wall	ceiling	wall	ceiling	wall	ceiling
Broadline		X		X	X°	X	X*	X¨	X	X
Lowtone		X		X	X°	X	X*	X¨	X	X
Standard		X		X	X°	X	X*	X¨	X	X
Reflective		X		X	X°	X	X*	X¨	X	X
Magnetic					X°		X*		X	X
Concave				X"			X		X	X

* Top profile fixing points: flex magnet, side profiles: standard magnet

^ Safety wire is mandatory as supplement to other installation systems (optional with wire hanging) when Soft Cells are installed in ceilings or on walls 3 meters or more above floor level

" Special wire hanging

° When used for vertical side hung mounting (hatches) corner reinforcement wire is added

¨ Used when a concealed magnet solution is desired (add additional cost)

Magnet fitting

The magnet fitting is the standard way of installing Soft Cells onto ceilings. For ceiling installations, safety wires should always be used. They should also be applied for any situation where Soft Cells are installed 3m or more above floor level, measured from the highest point of the Soft Cells to the floor.

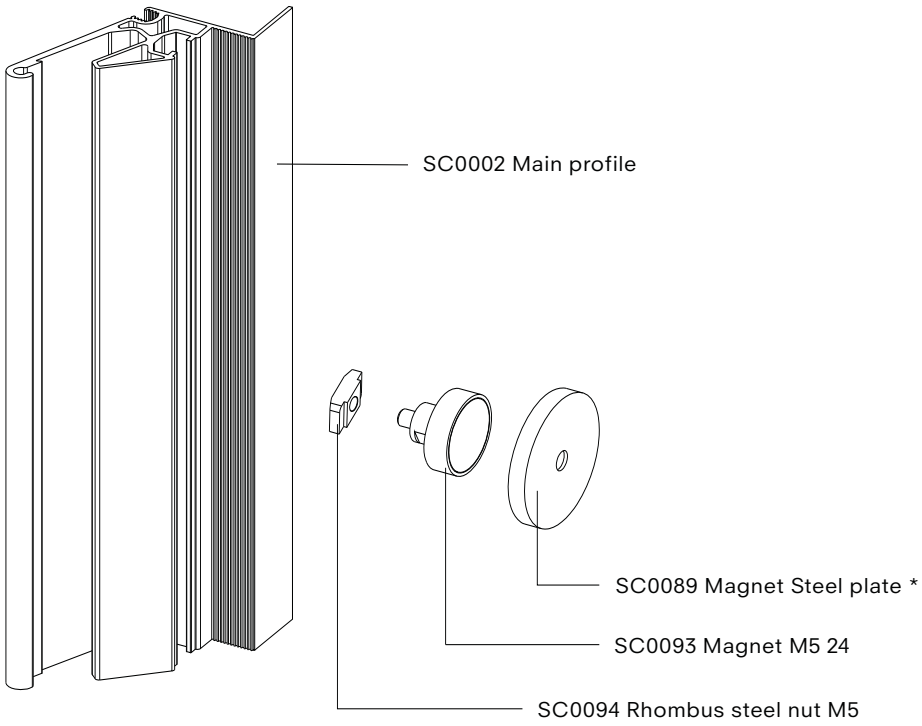
Amount of magnets is defined according the lengths and width of the panel See drawing on later pages (magnet installation ceiling). The correct number of magnets for each panel is stated on the panel label (installation kits width/ height) and can easily be mounted to the frame in the groove on the back of the panel and moved into correct position by gently releasing the magnet from the rhombus nut and sliding it along the groove. Magnets should be evenly distributed along the panel edge.

Mount the steel plate on the substrate/sub structure.

Align to the dimensions of the magnets mounted on the Soft Cells, to ensure the largest possible area of contact between magnet and steel plate.

Adjust the panel position by gently pushing the side of the Soft Cells.

SC0217 Magnet fitting v3



* Mounted with Countersunk 90° M6 (not delivered by SC)

Flex magnet fitting

The flex magnet fitting is as standard used in combination with the (standard) magnet fitting when Soft Cells are installed on walls. Flex magnets are used on the upper frame edge to prevent the magnet installation from sliding downwards. The flex magnet can also be used on corner edge panels for external corner solutions where two panels meet around a corner (see general guidelines) and for open edge ceiling installation where a concealed fitting solution is desirable.

Place the flex magnet plate (SC0209) inside the back of the frame profile. On models Broadline, Lowtone, and Magnetic the flex magnet plate should be pushed gently over the acoustic absorbent. Use the screws to attach it to the flex magnet holder (SC0207) placed on the back of the frame profile. Move the bracket into correct position by sliding it along the frame profile before fixing the screws. See drawing on later page for correct bracket amount and location (flex magnet installation)

Align and mount the flex magnet (SC0208) on the (wall) substrate. After installation, the flexmagnet can be adjusted clockwise/counterclockwise +/- 2 mm to achieve correct horizontal alignment. When used for external corner or open edge ceiling installation this adjustment is not relevant.

SC0206 Flex magnet fitting

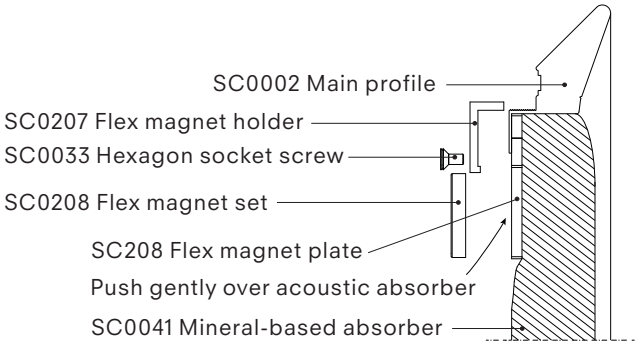
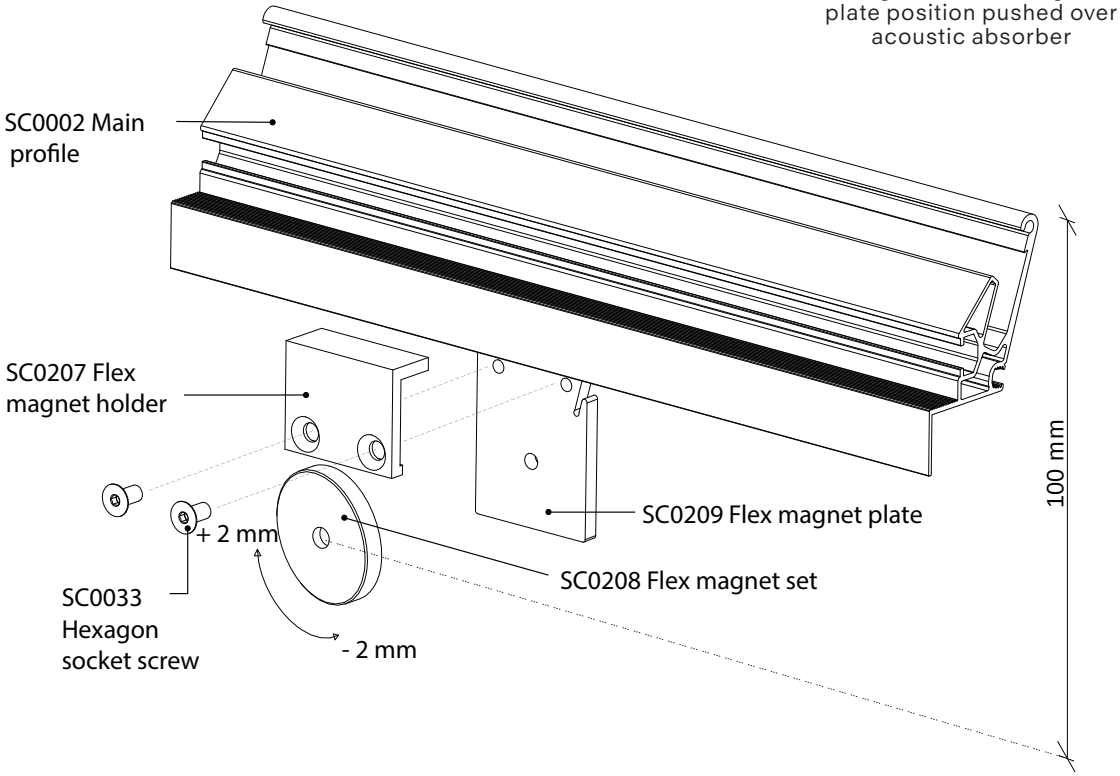


Diagram of Flex magnet plate position pushed over acoustic absorber

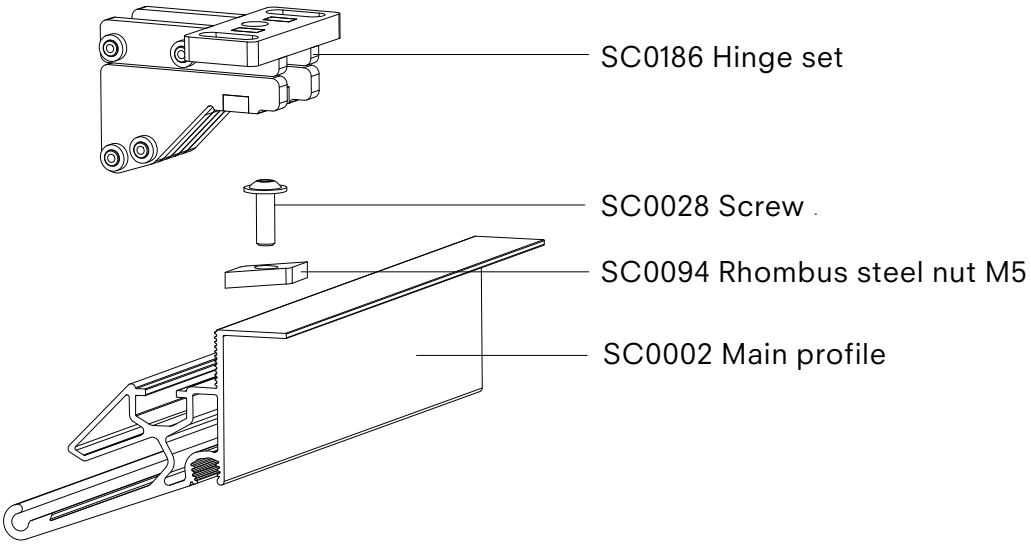


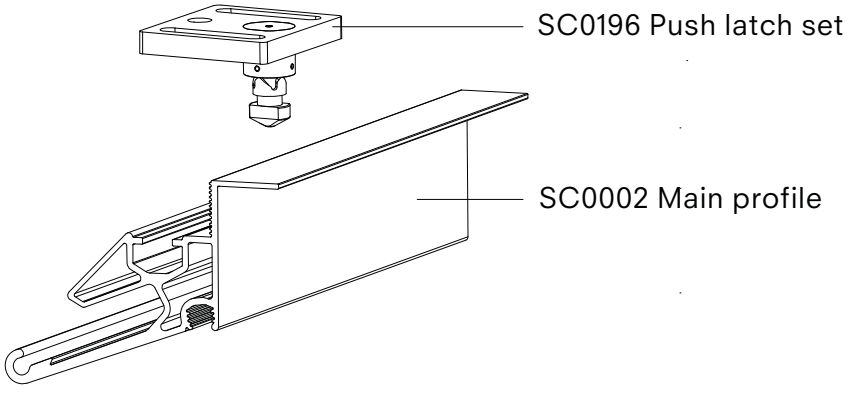
Hinge & push latch fitting

The hinge fitting is used together with a push latch in situations, when regular access behind the Soft Cells is required. When used for wall installation as hatch solutions (side hung Soft Cells) an additional cross reinforcement system is needed to stabilise the panel. Please see separate page for details.

All hinges are fastened on one side of the Soft Cells frame while the push latch is mounted to the substrate on the opposite panel side to click into the panel back groove. Adjust the slot position towards the substrate to align with the panel groove. The perpendicular sides are left without any fittings. Safety wires should only be placed on the push latch side of the Soft Cells panel.
See drawing on later page for correct bracket amount and location (hinge/ push-larch installation wall and ceiling)

SC0187 Hinge & SC0196 Push latch fitting





Reinforcement system

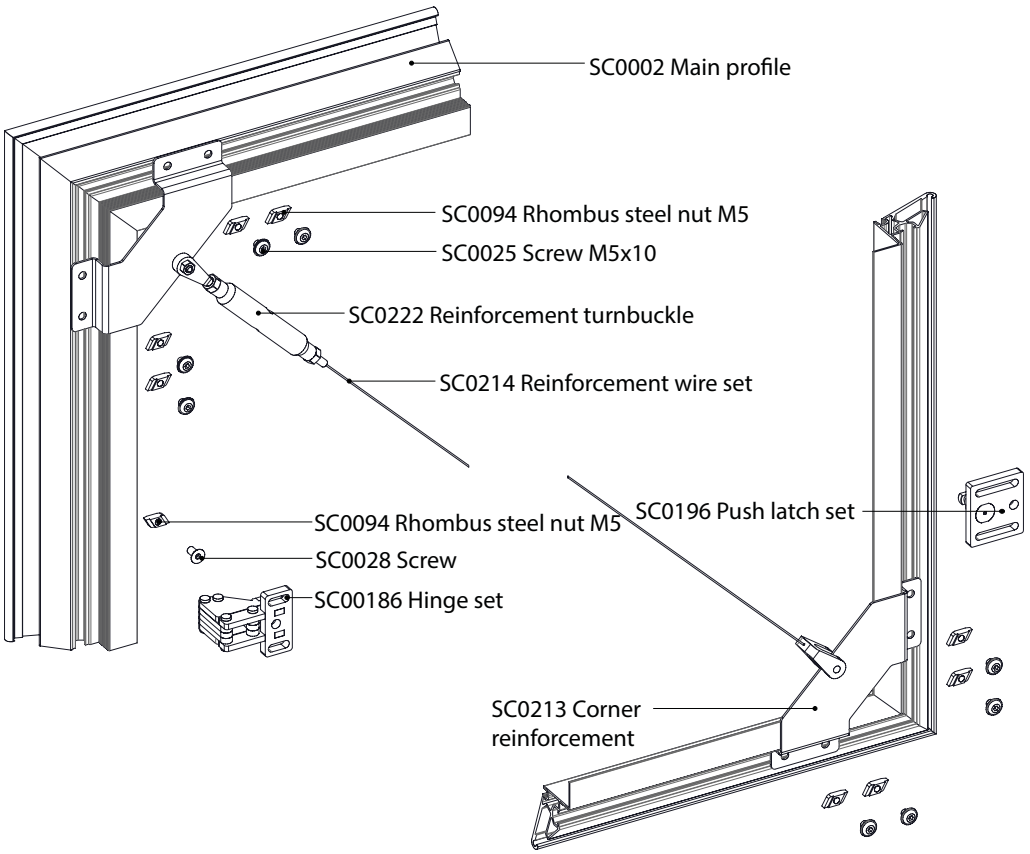
The reinforcement system is added when a hinge/push-latch installation is used on walls for hatch solutions (side hung Soft Cells). The reinforcement keeps the Soft Cells in the right (rectangular) shape.

Mount the reinforcement corner (SC0213) to the frame in the groove on the back of the panel for the two diagonal corners (hinge side up, push-latch side down) by using screws and standard rhombus steel nuts (SC0094)

Fix the reinforcement turnbuckle and the cable glider fork to either corner bracing and tension the steel wire gently.

Once the hinge push latch fittings are mounted (see hinge push-latch fitting) and the panel is installed to the (wall) substructure, the Soft Cells panel can be shape adjusted by turning the reinforcement turnbuckle thus tensioning or loosening the wire.

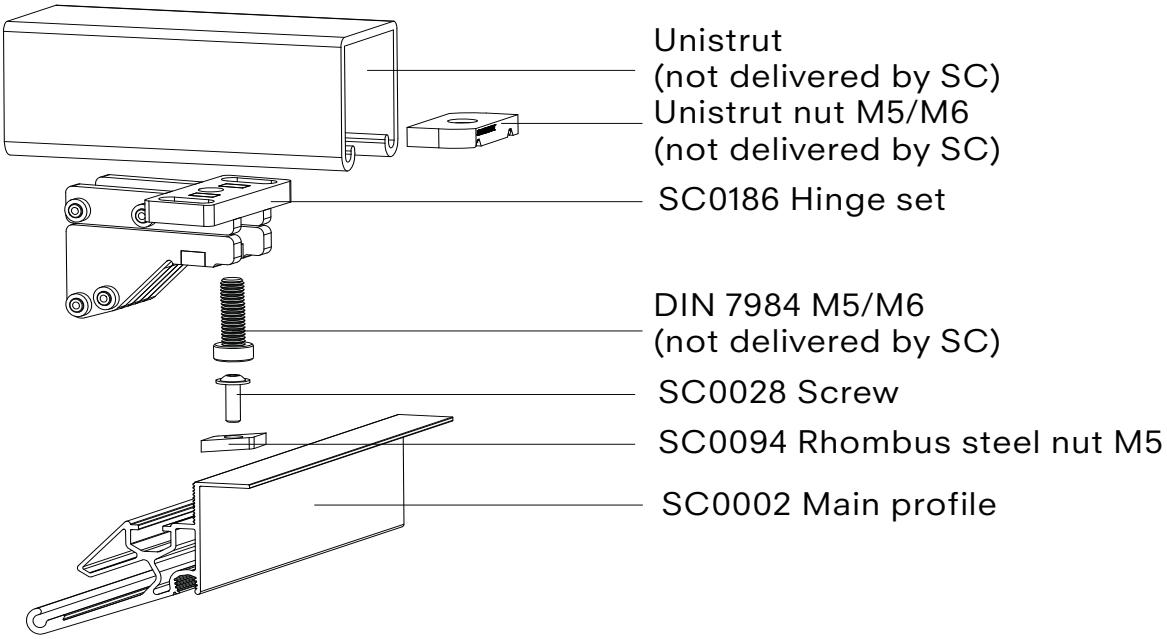
SC0215 Reinforcement system

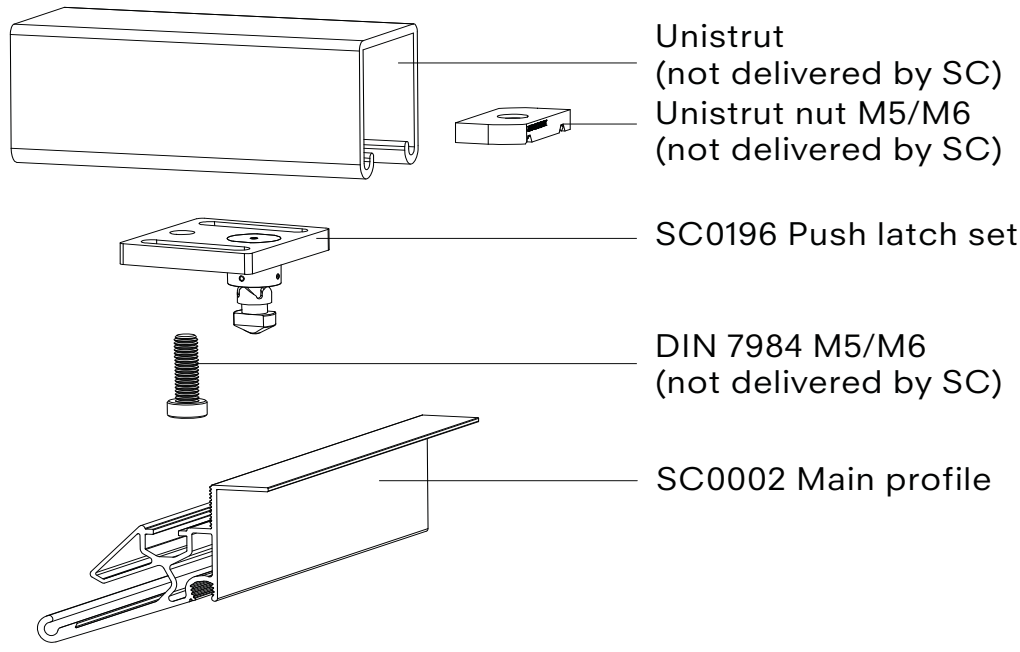


Hinge & push latch fitting unistrut

It is possible to install the hinge fitting on a sub-structure of unistrut profiles.
Use the slots for M6 on the plate and adjust the slots to align with the panel.

SC0187 Hinge & SC0196 Push latch fitting unistrut

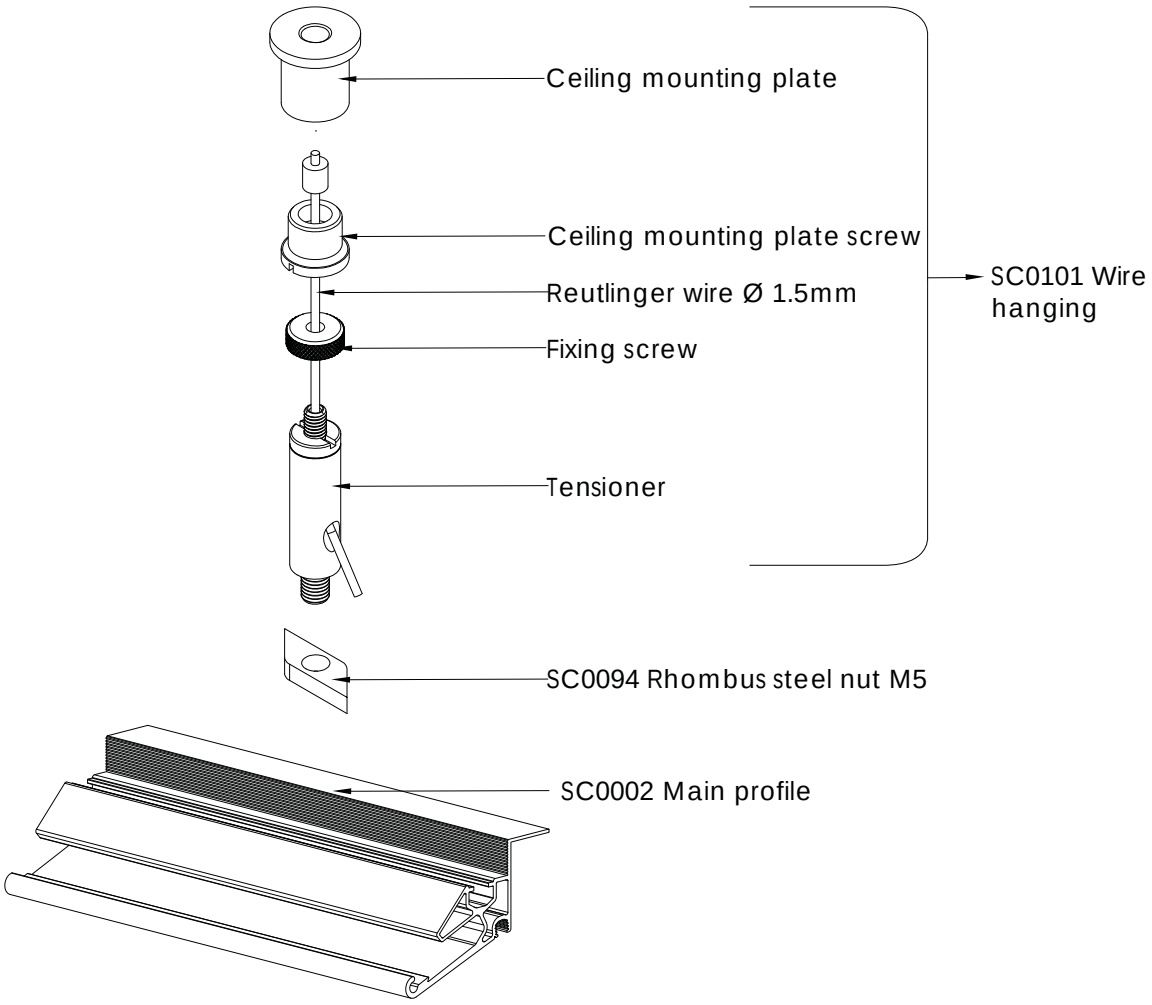




Wire fitting

Wire fitting is used only for ceiling installations. Pull the wire to move the Soft Cells panel. Use the fixing screw to secure the wire fitting installation upwards. Push the collar of the tensioner to release the wire and move the Soft Cells downwards. Safety wires are optional and become redundant once the fixing screws are fastened.

SC0107 Wire fitting



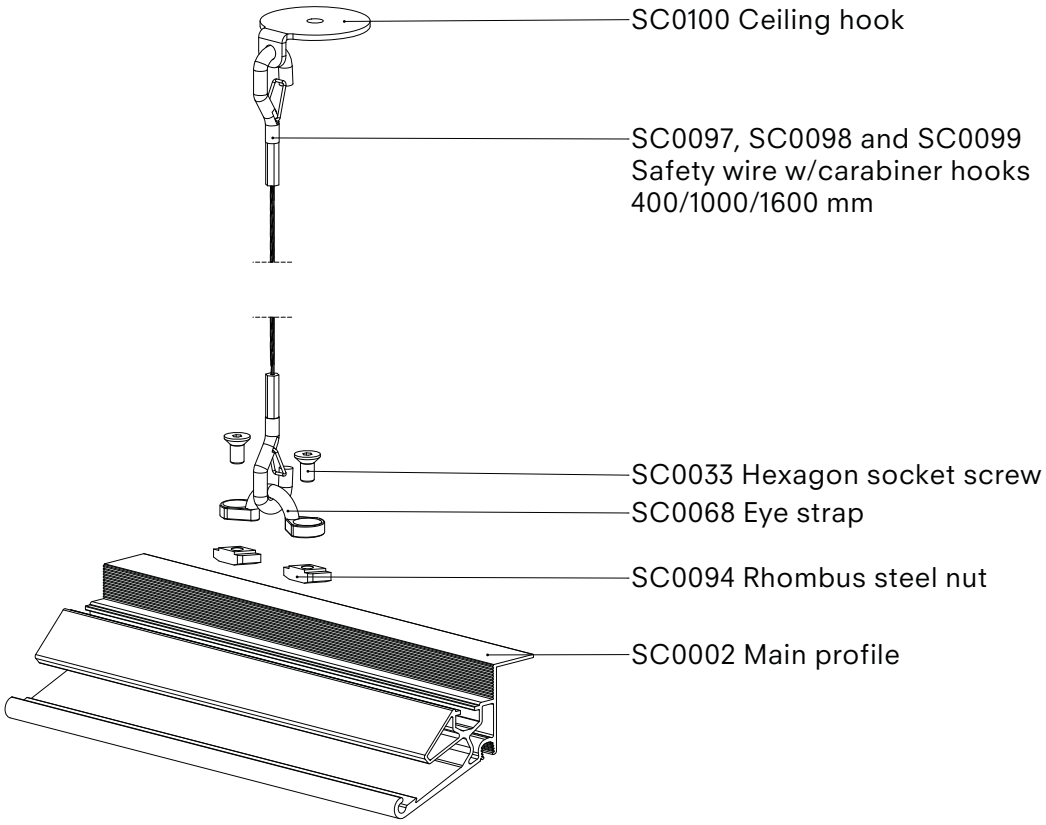
Safety wire

Safety wires are required for ceiling installations except when using a secured wire installation as above (optional). They should be applied for any other situation where Soft Cells are installed 3m or more above floor level, measured from the highest point of the Soft Cells to the floor.

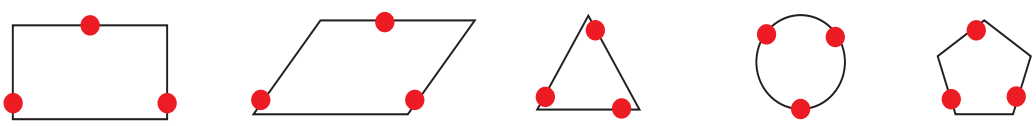
Safety wires are attached to the Soft Cells panel by fastening the eyestrap to the groove on the back of the panel. Three safety wires per panel should be installed placed on three different panel edges forming the largest possible triangle.(See example diagram below for safety wire location on panels).

In ceiling installation the safety wire system also serves as interim installation and can be used to temporarily release panels for servicing behind.

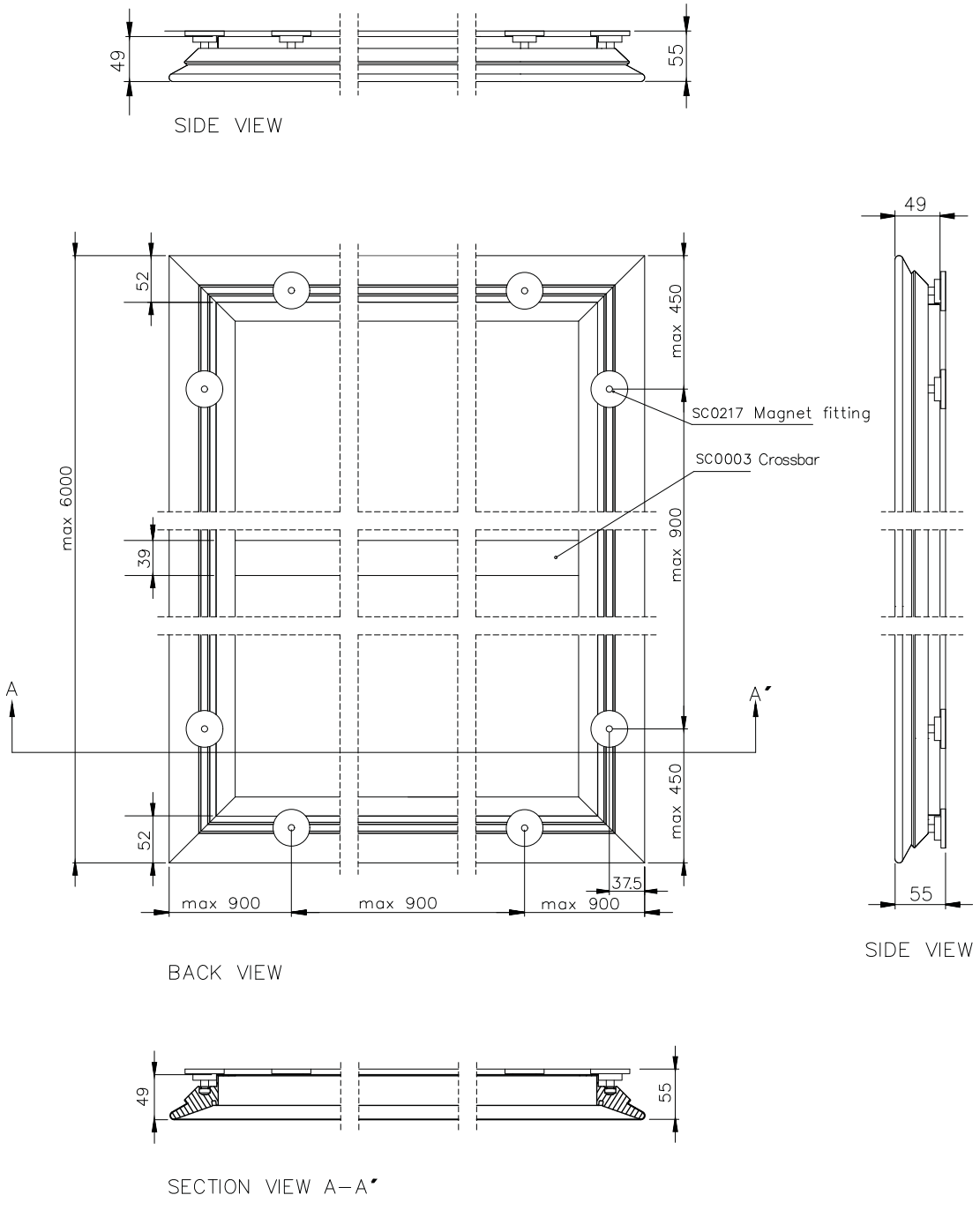
SC0218, SC0219, SC0220 Safety wire system



Safety wire location - examples

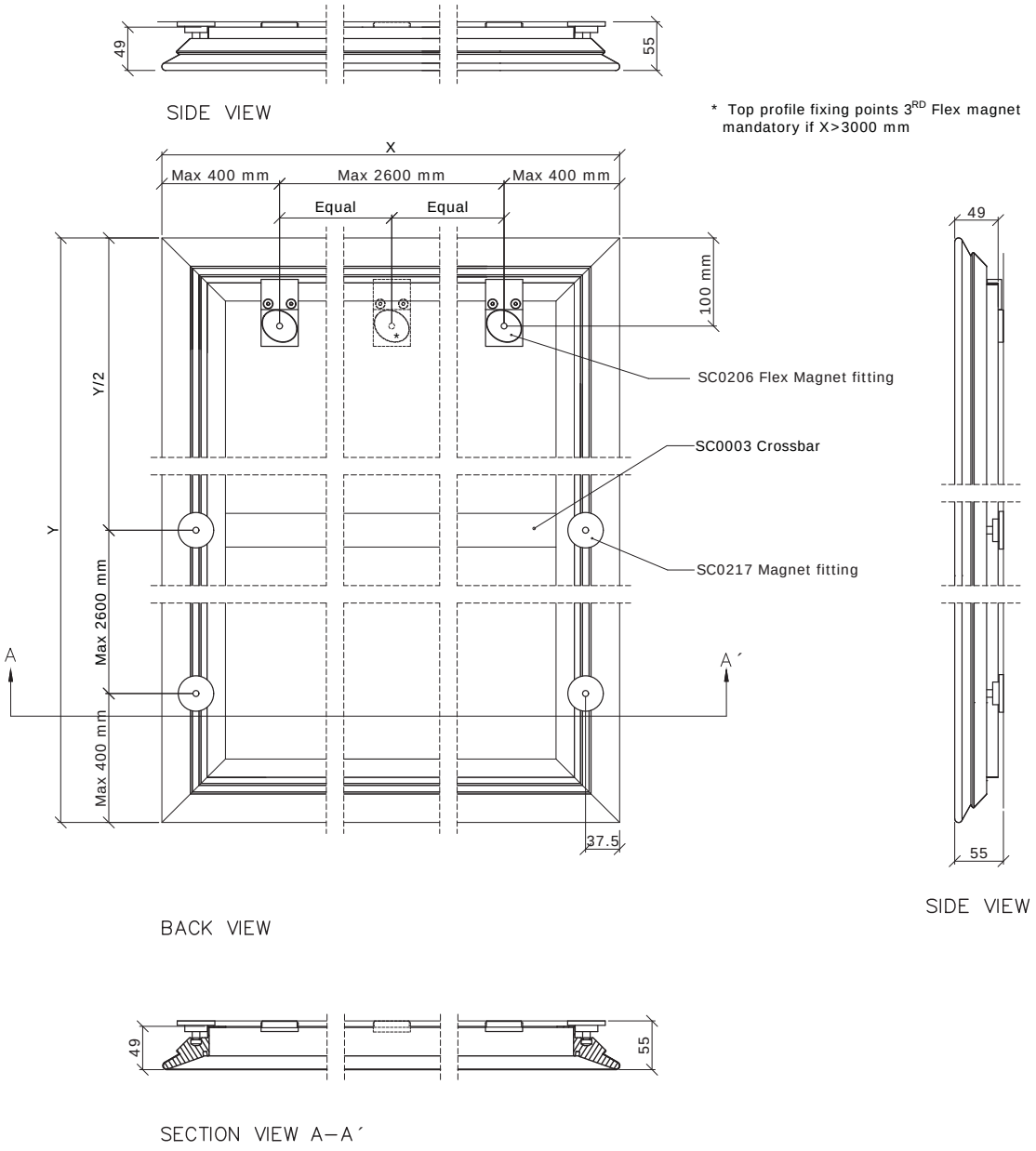


Magnet installation, ceiling



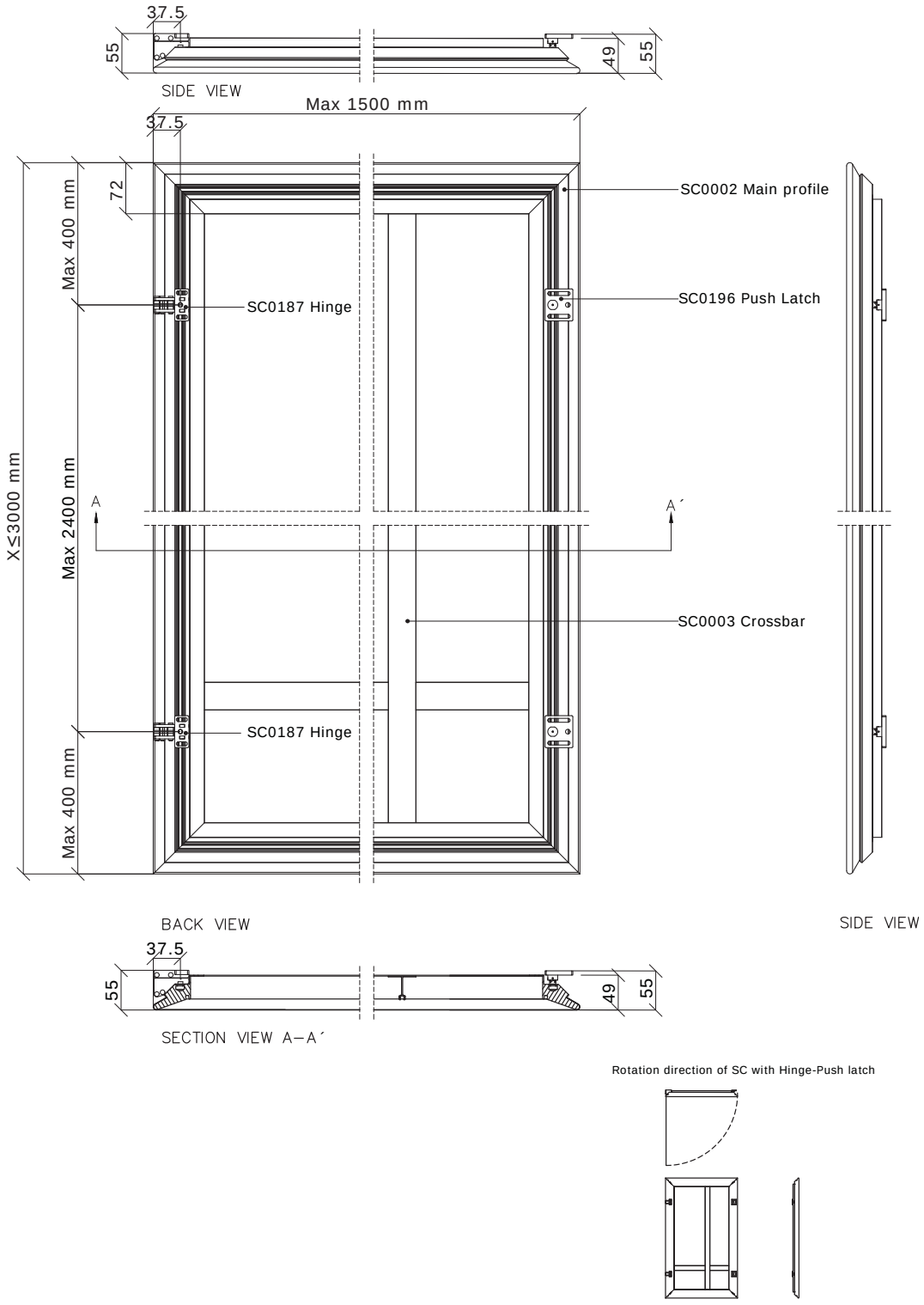
Amount of magnet fittings will depend on the panel size. See the panel label on the back of the panel for correct amount (installation kits width/height).
Always mount at least 4 fittings (two on each of the longest sides) for small panels and use the max distances from corners and between magnets cf. the drawing above when adding more.

Flex magnet installation, wall



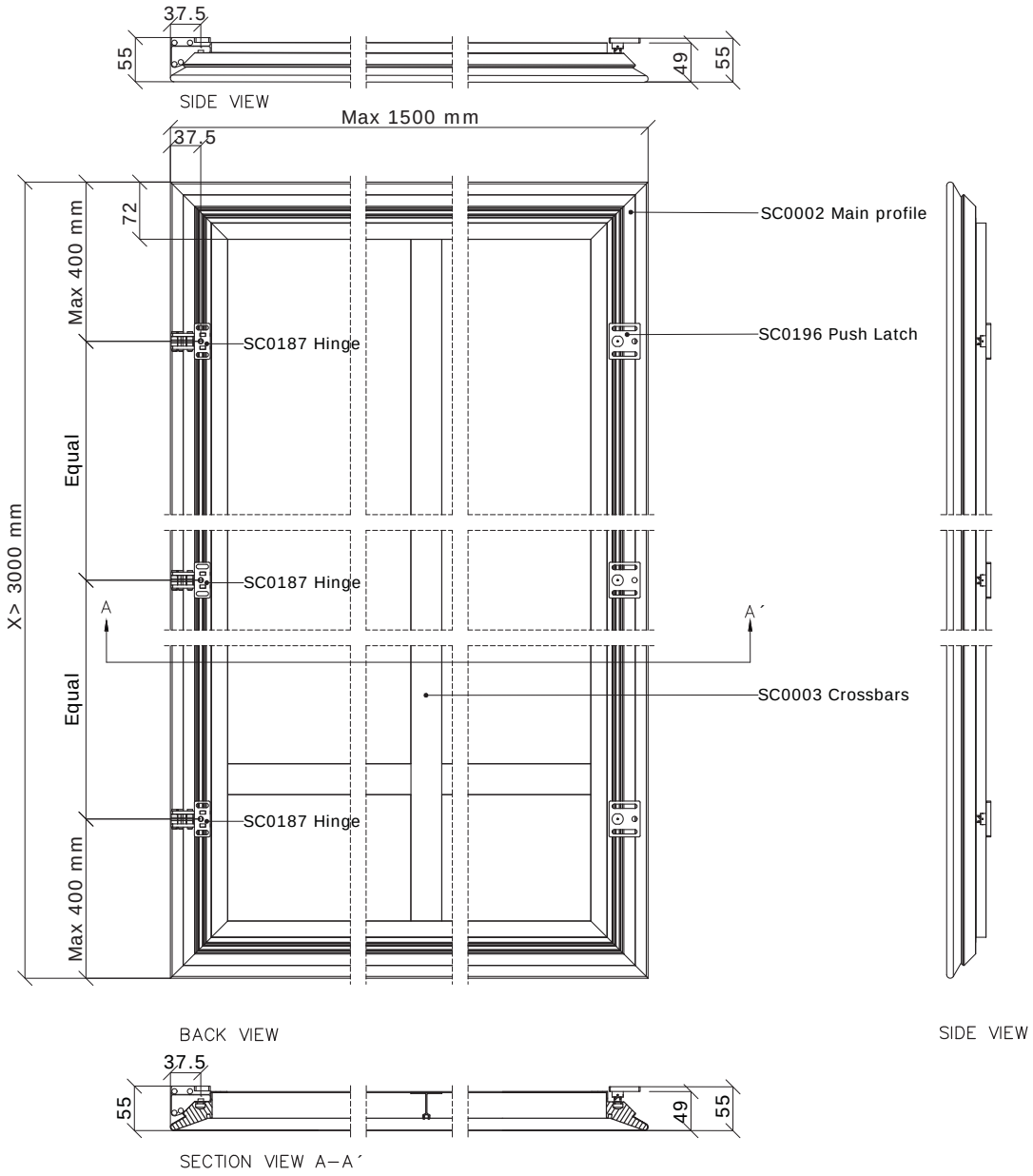
Flex magnet installation for wall is based on a combination of flex magnet fittings and (standard) magnet fittings.
As default 2 flex magnets and 4 (standard) magnets are delivered with each panel (2+4). The two flex magnets are mounted on the upper edge profile cf. distances in the drawing above. For all panel with a height below 3000 mm only 2 (standard) magnets - one on each side edge - are needed (2+2). For heights above 3000 mm, 4 (standard) magnets are needed (2+4). See distances in the drawing above.
For wide landscape panels (width above 3000 mm) an extra flex magnet should be added in the midpoint of the upper edge profile.

Hinge & push-latch installation, length ≤ 3000 mm, ceiling

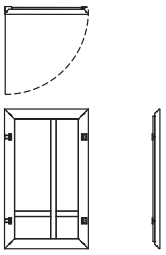


For hinge & push-latch installation in ceiling panels of max 3000 X 1500 mm are mounted with two hinges and two push-latches (at opposite sides).
Use the max distances from corners and between fitting points (hinges and push-latches) cf. the drawing above
The open sides (no fitting points) must not excede 1500 mm

Hinge & push-latch installation, length > 3000 mm, ceiling

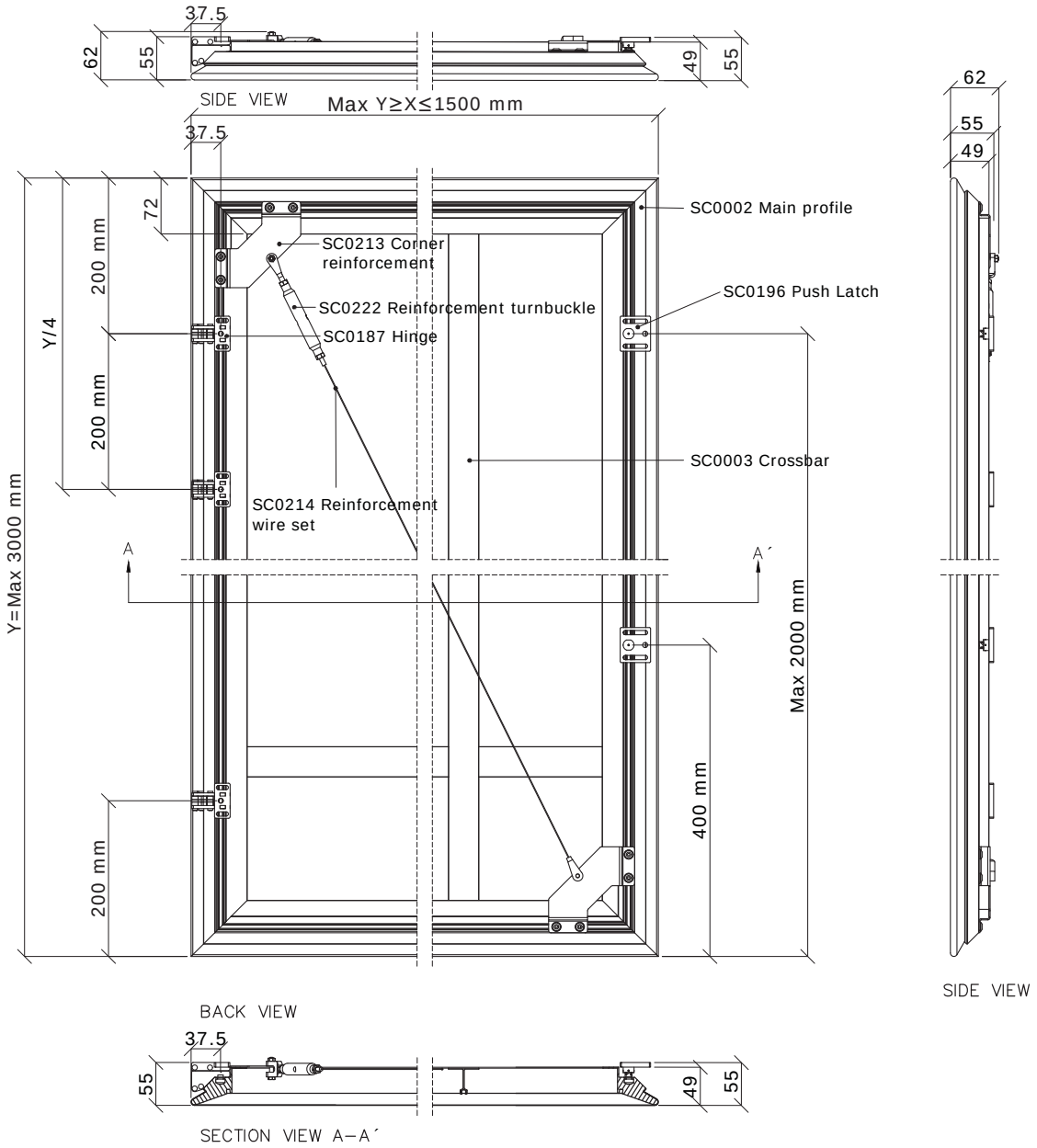


Rotation direction of SC with hinge-push latch



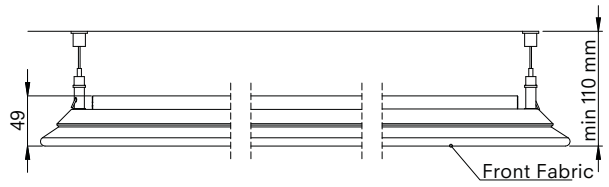
Hinge & push-latch installation in ceiling panels longer than 3000 mm (width max 1500 mm) are mounted with three hinges and three push-latches (at oposite sides).
Use the max distances from corners and between fitting points (hinges and push-latches) cf. the drawing above
The open sides (no fitting points) must not excede 1500 mm

Hinge & push latch installation, wall

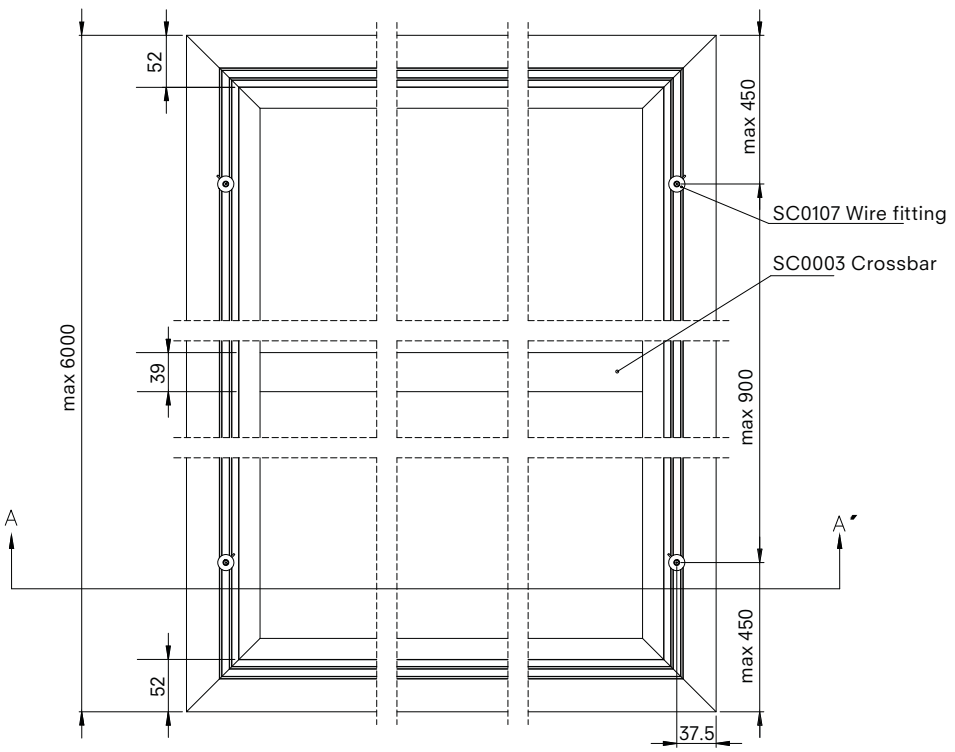


Hinge & push-latch installation for wall installation (side hung hatch) are mounted with three hinges and two push-latches (at oposite sides).
While top and bottom hinge are mounted at standard distance (200 mm from panels edge/corner) the third middle hinge is mounted at a fourth (1/4) of the total panel height from the top panel edge/corner.
The two push-latches are mounted on the oposite panel side at cf. drawing above in order to maximise operability.
Always add the cross reinforcement system before installaling the panel and use the tension fork to adjust the shape after installation.

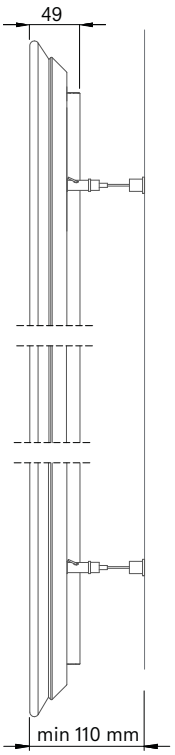
Wire fitting installation, ceiling



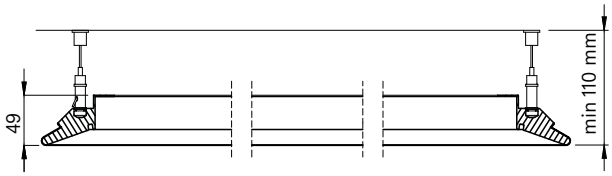
SIDE VIEW



BACK VIEW



SIDE VIEW



SECTION VIEW A-Á

Amount of wire fittings will depend on the panel size. See the panel label on the back of the panel for correct amount (installation kits width/height).
Always mount at least 4 fittings (two on each of the longest sides) for small panels and use the max distances from corners and between magnets cf. the drawing above when adding more.
Although optional, safety wires are redundant for wire fitting installation once the fixing screws of the tensioners are fastened (see wire fitting)