

SCREEN ZIP ECO

1. MEASURE-TAKING

The SCREEN ZIP ECO roller blinds can be placed into an opening or in front of it, and attached to the ceiling or wall.

The screen roller blind width and height shall be measured as follows:

W (width)

a) attachment into an opening:

Measure the actual opening width in three points, indicate the lowest dimension measured in the order form.

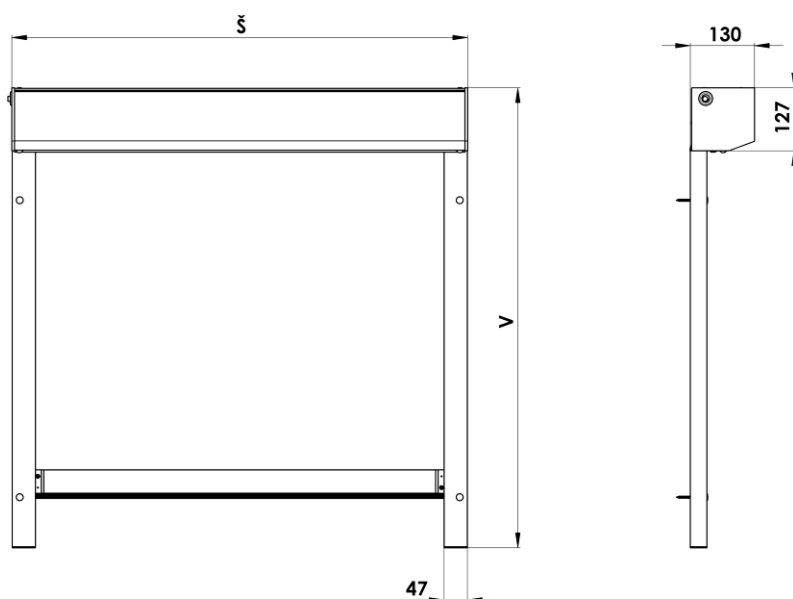
b) attachment in front of an opening:

As a rule, indicate the width of the opening which is to be shaded in the order form + 2 x 40 mm.

Dimensions outside the stipulated limits must be consulted with the manufacturer.

H (height)

Measure the overall height including the roller blind upper section



Dimensions outside the stipulated limits must also be consulted with the manufacturer.

SIDE GUIDING:

The SCREEN ZIP roller blind is equipped with a special application for the attachment of the screen fabric by the ZIP system, allowing its perfect attachment, tension and guiding in the guide bars. Thanks to this feature the roller blind is very stable and wind-proof.

COLOUR:

Box and guide bars:

- Standard version: ral 9006 (light silver), ral 9007 (dark silver), ral 7016 (anthracite grey);
- Other colours can be selected from the ral colour chart.

Plastic components cannot be painted.

2. SCOPE OF USE

The installation should be carried out in accordance with this manual in order to avoid unnecessary errors or other related troubles.

The roller blind was designed for use in both internal and external installations. The motor is moisture-proof, with ip44 protection rating. The roller blind is not intended for use in explosive environments. The service switch should be installed indoors. It is possible to install the switch outdoors but only with corresponding protection preventing the penetration of water and protecting all electrical components.

Power supply:

Electric power mains 230 v ac;

Frequency 50–60 hz;

Voltage fluctuation tolerance $\pm 10\%$;

Interference level below 70 db.

Operating conditions:

Ambient temperature $-5\text{ }^{\circ}\text{C}$ through $+50\text{ }^{\circ}\text{C}$;

Relative humidity up to 5 g/m³ and 75% (class i2);

Atmospheric conditions e11, e12, e14, e15 as per en 13561;

Wind resistance *

Motorised version – class 3 beaufort scale 6 (max. 49 km/h);

Crank version – class 0–2 (depends of the model).

*in case of outdoor installation: if adverse weather conditions arise, it is strongly recommended to draw the roller blind up to the box. For motorised roller blinds, it is recommended to use a wind sensor for the automatic roller drawing to the box.

3. OPERATOR REQUIREMENTS

All activities described for the installation, maintenance, and control of the motor limit switches should only be carried out by specialised, qualified personnel. Anyone can use the roller blinds on a daily basis.

4. GENERAL SAFETY REQUIREMENTS

Mechanical and electrical connection of the roller blind may only be carried out by properly trained and authorised persons. Any interference in the power supply requires a qualified electrician. Incorrect connection, incorrect installation, or any repairs, modifications, and alterations carried out by unauthorised personnel shall result in the loss of guarantee. We recommend using original accessories and spare parts. Our roller blinds are only intended for the use of original accessories.

During the installation

- Installation may only be carried out by qualified persons while observing the following instructions.
- Prior to installation, check the workplace in order to determine the presence of any electric wiring and to establish necessary safety measures to prevent direct or indirect contact with live parts.
- If the installation requires that the installer work at heights exceeding 2 metres above the ground, it is necessary to prevent loss of the installer's balance by safety measures, usually safety railing installed at all open sides of the workplace (on beam structures, platforms, terraces, scaffolds, balconies, etc.) or at elevated bridges. If it is impossible to use such facilities, suitable individual protection means must be used. The scaffolds, platforms, and elevated working areas must be erected by specialists (special contractors) in accordance with the regulations. Always use safety harnesses at scaffolds without railing or in other hazardous situations.
- In case of exterior installations, the power supply of handheld appliances must not exceed 230 V; if such appliances are to be used in wet or very humid atmospheres or in contact with large metallic objects, the power supply must not exceed 50 V. Safe voltage must be ensured through transformers corresponding to the European norm IEC 14-6.

During the use

NOTE: Do not block the roller blind if in motion. Put your hands outside the roller blind area prior to operation.

- Prevent children from playing with the control elements. Keep any remote controllers out of reach of children.
- Regularly check the roller blind for deformations, excessive wear, or other damage.
- Do not operate the roller blind during any maintenance activities (e.g. window cleaning).
- When automatic control systems (like sun/wind sensors) are used, disconnect the power supply before any activities or maintenance.
- Forced operation may damage the roller blind.
- Regularly check correct function of the roller blind.
- Do not use the roller blind if maintenance is needed.

5. UNPACKING

The SCREEN ZIP ECO system is supplied partially assembled, only the guide rails and accessories are packed separately. After removing the packaging material, check the roller blind for completeness and eventual visible damage to the components (upper box, guide rails. etc.). If unsure, **do not use the roller blind** and contact the seller.

NOTE: The packaging contains a box with accessories. All packaging materials (plastic sacks, polystyrene foam, nails, screws, wooden elements, etc.) are potentially dangerous, and must therefore be kept out of the reach of children.

6. INSTALLATION

Installation may only be carried out by qualified persons capable of adhering to all instructions stated below with full consideration of their safety and that of all other persons.

The main activities include:

- 1) Preparation of walls, ceilings, windows or other structures for the installation of roller blinds while using portable drills and screwdrivers;
- 2) Roller blind installation to a frame or wall;
- 3) Connection to power mains;
- 4) Adjustment (of end stops / motor limit switches, etc.) and testing of the roller blind.

PREPARING THE ROLLER BLIND FOR INSTALLATION

Prior to installing the roller blind, check whether the surface of the installation place is not damaged and if it is suitable for installation. Select suitable attachment screws (type and dimensions) corresponding to the type of structure onto which the roller blind is to be installed (wood, cement, brick, etc.).

NOTE: Faulty installation can lead to accidents. Observe instructions for the proper roller blind installation to prevent the risk of separation of the roller blind from a wall or window. ISOTRA a. s. shall not be held responsible for defects caused by faulty installation.

ROLLER BLIND INSTALLATION

The roller blind can be installed using two different methods:

1. Direct installation to guide rails, attached to the window frame (the guide rails are supporting elements of the roller blind);
2. Direct installation to guide rails, attached to the wall (the guide rails are supporting elements of the roller blind).

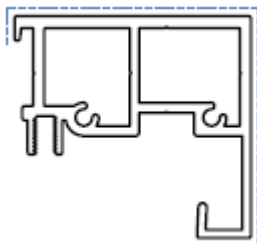
INSTALLATION OF GUIDE BARS

Proper method of installation of guide bars to the box depends on the box model used, and whether the box is attached to the ceiling, wall or directly to the guide bars. Only one type of guide bars is available – GS40.

GS40 non-drilled guide rail

GS40c front drilled

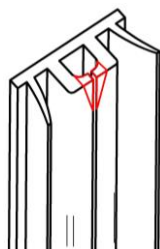
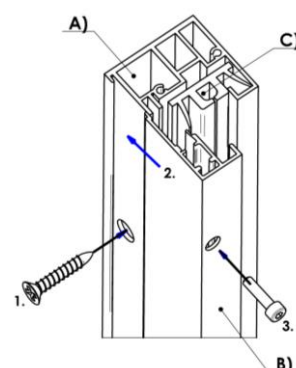
GS40b drilled sideways



The ZIP guide bars consist of three parts: two aluminium rails and a plastic inner rail, in which the ZIP runs.

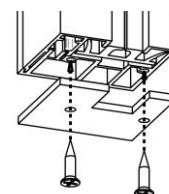
- A) aluminium guide bar;
- B) aluminium rail cover;
- C) plastic guide rail.

1. First, attach aluminium guide bar A) to the wall.
2. Insert plastic guide rail C) and close the unit with aluminium rail cover B).
3. Use the supplied socket head screws to attach the cover to the guide bar.



Cut the guide bar to length so that the edge is perfectly rectangular. After cutting the inner plastic rail, both upper edges of the section should be bevelled, as shown in the picture, which prevents wear of the fabric caused by sharp edges during operation.

If the guide bars do not lean against the window sill or floor, end covers must be used. Before further installation steps, attach the cover by supplied screws.



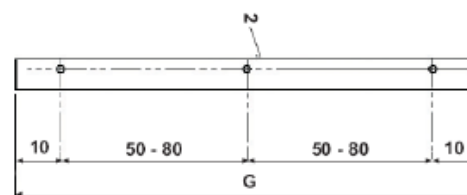
6.2.5.1. INSTALLATION OF GS40 GUIDE BAR

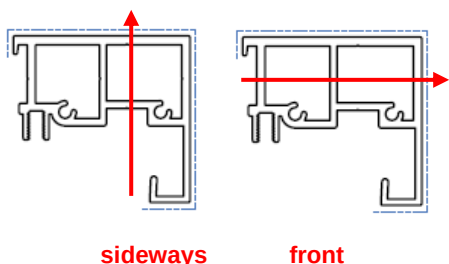
For model ZIP, only one type of guide bars is available – GS40.

The bar is supplied without holes or with pre-drilled holes, as per order, from the front or from the side.

Placement of holes:

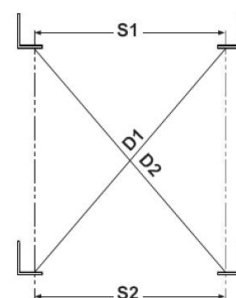
- outer holes are placed approx. 10 cm from the bar edge;
- intermediate holes are placed at approx. each 50–80 cm evenly along the guide bar.





The red line indicates the vertical axis for attachment screws. Use the drilled guide bars as a template for transferring the hole positions to the window wing wall. Attach the guide bars to the wall using screws and components suitable for the type of structure onto which they are to be attached (metallic structure, cement, brick, etc.).

Once the installation is finished, check parallelism and rectangularity of the guide bars. This can be done by measuring two distances "S1" and "S2" or diagonals "D1" and "D2". The dimensions must be the same ± 2 mm. Proper guide bar placement is vital, otherwise the function of the roller blind can be impaired. For front guide bar installation, plastic covers are supplied to cover the attachment screw holes.



7. WIRING OF THE SCREEN ZIP ECO ROLLER BLIND

Attach the motor switch (of the type requiring the presence of operating staff) to a wall. The switch must be installed in a position providing to the user unobstructed view of the moving roller blind. Observe instructions indicated in the installation instructions for the motor supplied with this manual.

All wiring must be made in accordance with valid IEC standards. Use impulse switches together with the control unit in all situations where there is more than one device to control the same roller blind. The control unit will store the provided impulse for approx. 3 minutes or until receiving another command.

NOTE: In order to have the installation correspond to international standards, a safety cut-off device having the contact opening distance of at least 3 mm must be installed in front of the circuit.

In case of installation of several roller blinds with group controls, where the user cannot see all the windows, adopt all measures to prevent that any persons or objects obstruct the movement of the roller blinds.

- Do not connect two or more motors to the same control unit without using a group control unit. Do not use light switches. Do not connect two or more switches to the same motor.
- Do not use switches with blocking without a control unit for group control, otherwise there is a risk of a duplicate command with consequent motor short-circuiting.
- Any damage caused by failure to comply with the above instructions shall not be attributed to the manufacturer and **shall lead to a loss of guarantee.**

8. ROLLER BLIND ADJUSTMENT AND TESTING

ADJUSTING THE MOTOR SWITCH LIMITS

NOTE: Wiring, installation and maintenance may only be carried out by qualified personnel, authorised and competent for said operations. The roller blind can be supplied either with a standard motor with an integrated remote control receiver:

STANDARD MOTOR:

The motor cable has 4 conductors:

- blue = neutral conductor,
- brown = opening/closing,
- black = opening/closing,
- yellow-green = ground.

When connecting the conductors to a terminal block inside the main switch, check which brown and black conductor corresponds to opening and which to closing of the roller blind (this depends on which side of the drum the motor is to be installed).

Motor switching can be installed in two different ways: either using a switch, or using a programming set (on request). **The instructions for programming and adjustment of limit switches are shown in a separate manual.**

To set up the limit switch, first turn on the motor to roll the roller blind down and set the required maximum down position, then run the motor in opposite direction to draw the roller blind up.

Prior to final connection and operation, check if the system works properly. Operate the roller blind for at least two consecutive cycles and check the function of thermal disconnection after 4 minutes of continuous operation. In case of any problems, study Chapter 8.

NOTE: There is a risk of compression in case a hand is trapped between the fabric and the upper box when the roller blind is drawn up. Before operating the roller blind, move your hands outside of the movement range to prevent compression. Vibrations or excessive noise indicate damage or faulty installation of the roller blind.

TESTING

To ensure proper function of the roller blind, check if the winding drum is perfectly level after installation.

Following the roller blind installation, check if the end user understands the method of operation of the roller blind, and give this manual to the user for future reference.

9. OPERATION

NOTE: Prior to setting the roller blind in motion, check if no persons or objects obstruct its movement. Before operating the roller blind, move your hands outside of the movement range to prevent compression. Forced operation can cause damage to the roller blind.

SAFETY DEVICES

The motor includes a disconnecting overheating protection. Thermal disconnection is activated after approx. 4–6 minutes of continuous operation. Before reactivating, let the roller blind motor cool down. Should you need assistance, contact your dealer and ask for original spare parts.

DISASSEMBLY / DISPOSAL

As regards Directive 2002/95/EC (RoHS) on the use of lead, chrome, cadmium and other substances hazardous to environment, the roller blind does not include any significant quantities of such substances. No special instructions have been stipulated for the disassembly or disposal of the roller blind. However, ISOTRA seeks to eliminate, if practicable, the use of such materials so that all parts of the roller blind conform to the requirements of said Directive.

In accordance with Directive 2002/96/EC on waste electrical and electronic equipment (WEEE), the motor and any installed electrical control units should be removed from the roller blind before disposal. Do not dispose of the roller blind as current municipal waste. All parts of the roller blind must be handed over to a local collecting centre for disposal. In case of replacement of the roller blind, it is possible to send the used roller blind to ISOTRA for disposal after a new roller blind has been ordered.

10. MAINTENANCE

It is recommended to carry out regular maintenance of the roller blind every two years. No maintenance activities are expected to be done by the user, except for fabric cleaning, if necessary.

FABRIC CLEANING

Fabric	Cleaning
SATIN, SATINÉ BLACKOUT, SCREEN NATURE, SATINÉ METAL, SCR3005	Clean with a brush, or wipe with a cloth damped in a solution of water and a neutral detergent. Do not scrub by force.
SOLTIS 92	Wipe with a cloth damped in a solution of water and a neutral detergent. Do not use alcohol-based stain removers. Do not scrub by force.

SCREEN ZIP

DEFECT	POSSIBLE CAUSE	SOLUTION
Fabric does not roll properly; side displacement of fabric	Uneven fabric thickness (manufacturing defect of the fabric).	Apply a distance layer (e.g. adhesive tape) directly onto the winding drum, on the side opposite to where the fabric is moving. Repeat applying further adhesive tape layers until the defect is completely removed.
	Drum cover displacement.	If there is no gap at the end covers for the fold, or if drum cover is used, open the box and make sure there is no displacement to either side. If so, ensure centring.
	Fabric is not centred in guide rails.	Open the box and check if the fabric is centred with respect to the two guide rails.
	Roller blind is not rectangular.	Series Z roller blinds have very low tolerance, thus perfect alignment is vital for the proper function. Check the roller blind for deformation and whether it is installed at right angles. Check any unevenness of walls or other supporting elements which can cause deformation between two sides of the structure. Use distancing elements if necessary.
Roller blind does not draw up fully	Winding drum axis is disconnected from the support.	Remove the box and check proper connection of the winding drum.

	Poor adjustment of end switches.	Adjust their position in accordance with instructions for the motor.
Roller blind is blocked half-way or does not draw down fully	Poor adjustment of end switches.	Adjust their position in accordance with instructions for the motor.
	Guide rails are not co-axial.	Check if the lower rail covers run smoothly along the cord or aluminium side bar, and repair eventual deformation caused by transport. Check if the side bars / cords are parallel and perpendicular to the drum.
Motor does not stop in end position	Two or more motors connected without the use of an electronic plate necessary for group operation.	Check wiring.
	Motor failure.	If the motor does not stop, even if the installation instructions for the limit switch adjustment have been adhered to: check if the motor front is properly attached to the winding drum and if there is no slipping during operation. Otherwise contact technical support.
Increased noise	Motor failure.	Disconnect the motor, test it, and replace if necessary.
Motor blocks after a long period of service	The motor is in the thermal disconnection phase.	Wait for several minutes until the motor cools down. NOTE: Put the switch into neutral position to prevent restart or uncontrolled operation.
Absolute absence of movement	Improper wiring.	Check power supply at the switch. Check power supply and integrity of a conductor between the motor and the switch.
	Motor failure.	Disconnect the motor, test it, and replace if necessary.
	Poor adjustment of limit switches.	Check if the motor is not regulated by the same stopping position in both directions. Press the switch and one of the limit switch buttons at once.

IMPORTANT: Do not disassemble the motor, otherwise you will lose the guarantee. In case of any discrepancy in operation the user should contact the dealer or directly the manufacturer, ISOTRA a. s. Any and all maintenance may only be carried out by qualified personnel. If the fabric or motor replacement is necessary, follow instructions given in the installation manual.