

## **TECHNICAL AND OPERATIONAL DOCUMENTATION**

ASSEMBLY INSTRUCTIONS,

OPERATION AND SAFE USE

- 2. Refleksol sunshade
- 2.6. ZiiiP Reflexol: 95, 120, BOX, Large

**PRODUCT NAME:**

- SUNSHADE  
REFLEKSOL ZiiiP 95, ZiiiP 120, ZiiiP BOX, ZiiiP Large

**THE PRODUCT MANUFACTURER'S DESIGNATION:**

- Manufacturer name:  
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**PRODUCT SAFETY MARKING:**

The product meets CE safety requirements.

**THIS TECHNICAL AND OPERATIONAL DOCUMENTATION:**

- It is valid from: 15 June 2019.
- Valid for product versions marked above

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## 1. INTRODUCTION

### 1.1. PRODUCT SAFETY NOTES

The product has been manufactured in accordance with the latest technical knowledge in design and manufacturing technology and is supplied in a condition for safe use.








The safe design of the external product has been achieved through:

Lp.	Subject	European legal basis	Polish Legal Basis
1	External curtains and awnings. Performance requirements including security	EN 13561:2015	PN-EN 13561:2015
2	Construction products (CPR)	Regulation 305/2011 of the Parliament European Parliament and of the Council	Act of 16.04.2004 on products Construction (Dz. U. 2004 no. 92 pos. 881) as amended (Dz.U.2016.1570; Dz.U.2015.1165; OJ 2016.542)
3	Essential requirements for machines	Directive 2006/42/EC of the Parliament European Parliament and of the Council	Regulation of the Minister of Economy of 21 October 2008. DZ.U.2008 nr 199 poz.1228) 1228 as amended (OJ 2011.124)

Related documents: Declaration of Performance, Declaration of Conformity (engine products) and Instruction Manual. installation, use of motors and control.

### 1.2. EXPLANATION OF SYMBOLS AND MARKS

The following symbols (pictograms) indicate particularly important hazard and safety information.

Pictogram	Meaning of the pictogram	Information
	INFORMATION	Before using the product, please read the instruction manual Compliance with the operating instructions is a condition: - failure-free operation of the product, - implementation of claims for defects. For the safety of persons, keep the instructions.
	INFORMATION	No harmful or hazardous consequences for people or objects.
	NOTE	Situation that could cause damage to the product or other damage. No risk to humans.
	WARNING	Risk of danger
	DANGER	This symbol denotes all safety information that the non-compliance poses a risk to the life or health of persons. Risk health or life. Risk: danger of serious injury or death. Dangerous operation likely to cause injury or damage product.
	WARNING!	Risk to health or life through electric shock.
	ENVIRONMENT	Identification of the electrical or electronic equipment to be collected at designated points.

### 1.3. TERM INS AND DEFINITIONS

The terms and definitions used in this documentation mean:

**ROLLER/DRAWER:** an external, retractable sunshade, installed in front of a window, or anywhere within the external surface of a building, in which the stretching and retraction (raising and lowering) of the cover is carried out by means of a control mechanism (electric with a drive system connected to the control system).

**STITCHING:** a part of a product made of fabric or other material which is set in motion by a control mechanism, ensuring that the product performs its function.

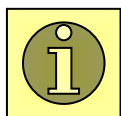
### 1.4. SUBJECT MATTER, PURPOSE AND CONTENT OF THE DOSSIER

The products manufactured by SELT Sp. z o. o. are the subject of this documentation.



The instructions for use and safe operation, together with the engine manual, must be handed over to the end user

**IMPORTANT SAFETY INSTRUCTIONS  
WARNING - FOLLOWING THESE INSTRUCTIONS IS ESSENTIAL  
FOR THE SAFETY OF PERSONS  
KEEP THIS MANUAL**



The documentation is valid together with the product-specific information available at [www.selt.com](http://www.selt.com).

Documentation includes :

- important recommendations for assembly, use and maintenance of the product
- important recommendations for transport and storage
- guidelines, compliance with which will allow the product to operate for many years without failure.

**SELT Sp. z o.o. will not be held liable for damages resulting from non-compliance with the recommendations contained in this documentation.**

In order to further improve the product, SELT Sp. z o.o. reserves the right to make such changes as, while maintaining the essential technical parameters, are deemed advisable in order to improve the quality of the product handling and safety of use.

The copyright for this documentation remains with SELT Sp. z o. o. with its registered office in Opole. Without permission, the documentation may not be used, either in part or in its entirety, for competitive business or made available to third parties.

## 2. IN TECHNICAL DESIGN OF THE PRODUCT

The technical product specification is available by logging on to [www.selt.com](http://www.selt.com).

### 2.1. PARAMETRY:

Dimensions:	Width	Height	
ZiiiP 95	100 mm	95 mm	
Cassette ZiiiP 120, ZiiiP Large	126 mm	126 mm	
ZiiiP 120 flush-mounted cassette	143 mm	126 mm	
BOX1 cassette	161 mm	216 mm	
BOX2 cassette	191 mm	216 mm	
System ZiiiP 95 (max)	2700 mm	3000 mm	
System ZiiiP 120, ZiiiP BOX1 and BOX2 (max)	4000 mm	4000 mm	
ZiiiP System Large (max)	5000 mm	3000 mm	
ZiiiP refleksols: Available with a two-piece guide equipped with a gasket system, with a lock and guide profile for full shading (internal and external use)			
Driven by an electric motor with parameters:			
	ZiiiP 120, ZiiP Box	ZiiiP 95	ZiiiP Large
- supply voltage	230V/50Hz		
- power	120 to 145 W	From 80 to 130 watts	120 to 145 W
- current consumption	0.5 to 0.64 A	0.4 to 0.55 A	0.5 to 0.64 A
- protection class	IP 44		
- continuous operation time	4 min		
- torque	10 Nm	6 to 9 Nm (depending on engine version)	10 Nm
- speed	14,17, 26 rpm (depending on engine version)	16, 28 or 30 rpm (depending on engine version)	14, 17, 26 rpm (depending on engine version)
- operating temperature	Standard, Somfy -25 to 70°C, Elero -20 to 60°C	Standard, Somfy -25 to 70°C, Elero -20 to 60°C	Standard, Somfy -25 to 70°C, Elero -20 to 60°C
Assembly:			
Application of ZiiiP (all types)	external		
On-site assembly	Cassette mounted to ceiling, wall or as a self-supporting system - cassette held by fixed tracks For flush-mounted systems, self-supporting by prior arrangement possible)		

Detailed data on the performance of individual engines is available on the engine manufacturers' websites and on the website:

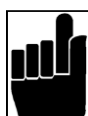
[www.selt.com](http://www.selt.com) → OUR OFFER → AUTOMATION

### 2.2. PRODUCT CHARACTERISTICS

ZiiiP 120, ZiiiP 95, ZiiiP Box 1, ZiiiP Box2 and ZiiiP Large, are textile roller blinds designed so that the fabric remains under constant tension regardless of the position. This solution allows you to enjoy the roller blind's functionality even in strong gusty winds. It is the only solution of its kind for outdoor use.

**They are characterised by the following features:**

- They are designed to be mounted on window openings
- The flush-mounted version and the Box1 and Box2 versions have a groove for plastering and a revision to the underside of the cassette,
- BOX2 version has additional 30 mm of thermal insulation at the back of the cassette
- The ZiiiP Large version is dedicated to the shading of large areas, particularly for pergola installations.
- They restrict sunlight from entering the room.
- They increase the proportion of diffused light in a room.
- They protect the room from overheating and thus contribute to a more comfortable indoor environment.
- They reduce the costs associated with room air conditioning.
- They reduce noise penetration into the building.
- They do not emit toxic substances during operation.
- Noise emissions from an electromechanically driven product (related to the working movement of moving parts, produced by an electric motor during operation) are not considered a significant hazard and are a matter of comfort, the sound pressure emission level being less than or equal to 58 dBA.
- The motors have enclosure protection level IP 44
- The design of the product and the drive allows the product to stop safely at any height in the up-down working area and remain there in a suspended state.
- Up and down movement is via an electric switch or remotely via remote control.
- The guards for the moving parts are designed and manufactured to ensure the safety of the operators, assuming they are operated correctly.



In the case of large roller blinds, where it is necessary to join the fabric strips by welding (welding is the level of joining of the fabric), the fabric memory effect, so-called "curling", may occur most frequently; this does not cause the system to malfunction and is not a product defect.

### 3. TRANSPORT AND STORAGE OF GOODS

#### 3.1. COMPLETENESS AND QUALITY CONDITION OF THE DELIVERY

SELT Sp. z o. o. makes every effort to ensure that the goods conform to the order. However, it is up to the Purchaser to check the completeness of the product and this should be done at the time of receipt.

Any discrepancies should be reported immediately to the driver/warehouseman/assembly team and noted on the acceptance report or on the WZ document under pain of losing any claims.

Quality checking for overt defects is the responsibility of the Purchaser and should take place at the time of acceptance of the goods. Overt defects are considered to be mechanical damage, scratches, cracks, etc.

SELT Sp. z o.o. undertakes to replenish or replace any parts with obvious defects as quickly as possible.

#### 3.2. GENERAL CONDITIONS FOR TRANSPORT AND STORAGE OF THE PRODUCT

**List:**

- The product is pre-packed in a cardboard box to prevent damage during storage, during transport and during movement to the final installation site.
- Transport/storage products should be positioned in accordance with the arrows on the product packaging.
- Products should not be stored in more than 2 layers due to the possibility of the packaging being crushed, which may result in permanent damage to the product.
- Products placed on the means of transport must be secured against displacement and damage during transport (e.g. spacers, safety belts, etc.).
- During transport, the products must be protected from rain or snow.
- Storage areas should be dry, ventilated and protected from the harmful effects of the weather (sun, rain, etc.).
- If the weight of the product exceeds 25 kg, its handling to the final assembly site must be carried out by at least two people.

#### 3.3. DESCRIPTIONS THAT MUST MANDATORILY APPEAR ON THE PRODUCT PACKAGING.



Before installing and using the product, carefully read the technical and user documentation available at [www.selt.com/doc-en](http://www.selt.com/doc-en).

#### 4. ASSEMBLY OF THE PRODUCT

This chapter contains the general requirements for the installation of the product. Correct assembly is a prerequisite for the smooth functioning of the product. SELT Sp. z o.o. recommends the use of specialised assembly teams to guarantee the correct installation to the purchaser.

##### General requirements for safe installation

- The general rules of the art of construction must be observed.
- Observe the applicable health and safety regulations, especially those concerning the safety of working with electrical equipment and working at heights.
- The product must be fixed mechanically (foams, adhesives or similar materials are not permitted as fixing materials).
- The product should be fixed to permanent building elements (walls, lintels, steel structure, aluminium structure, window joinery).
- The base to which the product's wall and ceiling brackets will be attached should be a secure structure (concrete, brick, etc.).
- The product must not be fixed to elements that do not provide adequate load-bearing capacity.
- Installation shall be carried out to even, dry masonry surfaces of adequate strength, executed in accordance with the general rules of the building trade.
- In the case of metal structures joined together in accordance with the current rules for joining metals, assembly is carried out to materials with the appropriate wall thickness.
- All unnecessary components must be removed from the installation zone before installation.
- Before installation, all mechanisms not necessary for the operation of the drive should be disabled.

##### Information table

The manufacturer allows the product to be installed in the following types of substrate (masonry bearing layer):

- unreinforced or reinforced concrete of min. C20/25 non-cracked,
- concrete as above with a thermal insulation layer up to 25 cm thick,
- masonry min. 24 cm of solid bricks Mz format NF with strength min. 20 MPa and density >1.8 kg/dm<sup>3</sup> in M2.5 to M9 mortar,
- masonry min. 24 cm of silicate blocks with strength min. 10 MPa and density >2 kg/dm<sup>3</sup> on mortar M2,5 to M9
- masonry min. 17.5 cm of open-cell silicate blocks with a strength of min. 20 MPa and density >1,4 kg/dm<sup>3</sup> on mortar M2,5 to M9.
- timber beams (wall/ceiling) of min. C24 without cracks at a thickness of min. 100 mm
- wooden rafters of min. C24 without cracks at a thickness of min. 70 mm
- silicate block masonry (solid or hollow) with a thermal insulation layer - consultation required consultation with qualified designer,
- solid brick masonry with thermal insulation layer - consultation with a qualified designer required,
- brick masonry from hollow ceramic blocks without thermal insulation or with a thermal insulation layer - consultation with an authorised designer required
- cellular concrete blocks - substrate not recommended.

*The above list of substrates is indicative only. The suitability of each substrate depends on the specific location and size of the product and must be selected by an authorised constructor.*

#### 4.1. REQUIREMENTS FOR THE SAFE INSTALLATION OF THE PRODUCT AT HEIGHT



The assembly of the product is particularly dangerous as it involves work at a height and poses a particularly high risk to human health and safety, in particular falls from height.

The Purchaser is obliged to carry out the assembly process in accordance with the health and safety regulations currently in force for the country concerned. It is the responsibility of the Purchaser to draw up a health and safety plan during the installation process.

During installation, the Purchaser shall comply with health and safety regulations relating to work at height, in particular:

- direct supervision of their execution by persons designated for this purpose (e.g. works manager, foreman),
- appropriate safety measures, primarily fall protection equipment,
- detailed instruction of workers performing work at height,

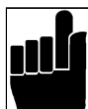


- the need to use: ladders with appropriate quality and safety certificates, scaffolding, safety brackets, platforms with adequate strength for the anticipated load.

Work at height where personal fall protection equipment is required must be carried out by at least 2 people.

#### 4.2. PREPARATION FOR INSTALLATION

- Unpack the product and check that all the components necessary for installation are present.
- Before installation, check the dimensions of the window opening against the product specification on the packaging.
- Before installation, check that the substrate has sufficient load-bearing capacity for safe installation and operation.



Please note that the pins, screws or bolts securing the product to the structure depend on the type of substrate and are therefore not included with the product and are to be purchased by the purchaser or installer.

#### 4.3. GENERAL GUIDELINES FOR ASSEMBLING THE PRODUCT

- The attachment of the guards/handles to the structure is carried out with dowels and screws (not included in the product).
- In the case of a reinforced concrete or solid brick lintel, wall plugs sized to the load-bearing capacity of the component to be installed are used for installation.
- In the case of walls made of hollow-core materials, the appropriate mounting systems designed for this type of material are used for installation.
- The longitudinal axis of the product winding tube must be level, otherwise the product will be defectively wound.
- The product must be protected from contamination (e.g. mortar, installation foam, silicone) as this can damage it.
- The use of chemicals for assembly that contain bituminous or other components that react with the product components is not permitted.



Incorrect installation can contribute to dangerous situations for the user.

#### 4.4. ASSEMBLY TOOLS

##### List of installation tools:

- Drills for metal and concrete.
- Impact drill.
- Ladder/scaffolding.
- Screwdriver.
- Hammer.
- Measure.
- Pencil/writer.
- Level.
- Arbor keys (Allen keys).
- Cutter.

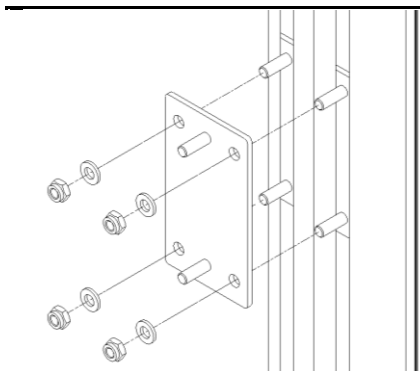
#### 4.5. ASSEMBLY

Instructions for assembly, operation and safe use after logging in are available at [www.selt.com](http://www.selt.com).



If the product is transported incorrectly (vertically), the fabric may shift on the roller tube and the bottom beam. Therefore, check the position of the fabric on the roller tube and the bottom beam before installation.

##### 4.5.1. MODULAR HANDLES



1. Insert the mounting plates for the self-supporting handle into the guides.
2. Screw the module holder mount to the sheet metal.

#### 4.5.2. INSTALLATION OF REFLEKSOL ZIIIP 95

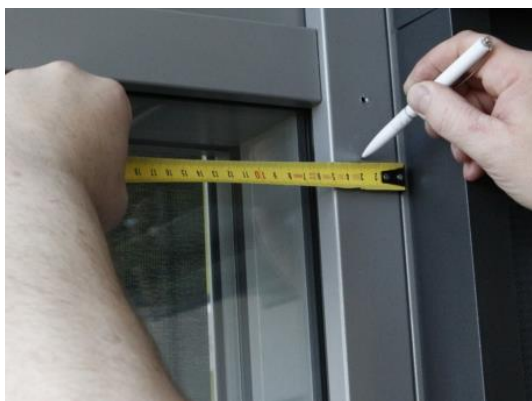


Photo 1

1. Determine where to mount the guides or bracket directly.

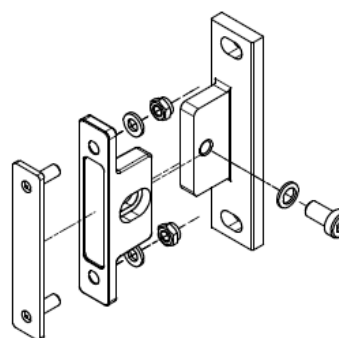


Fig. 1 Handle



Photo 2

2. Drill holes for fixing screws.



Photo 3

3. Check guide plumb.



4. Fix the guides to the floor.

Photo 4



5. Determine the installation location for the second guide, repeat the steps as for the installation of the first guide.

Photo 5



6. Place the cassette assembly on the guides.

Photo 6



7. Slide the guide profile onto the lock.

Photo 7

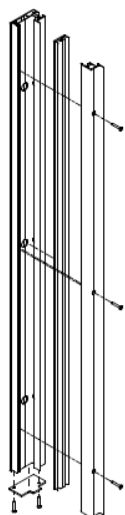


Fig. 2

8. Figures 2 and 3 show the sequence and assembly of the guide assembly components and their positioning relative to each other.



Fig. 3



9. Insert the guide profile into the guide profile, then insert the guide revision profile.

Photo 8



10. Tighten the screws securing the rail.

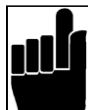
Photo 9



1. Check that the handles are securely fastened - dislodging them can pose a danger to people.
2. After installation, check the correct operation of the product, set the end positions in accordance with the motor operating instructions.



**4.5.3. REFLEXOL ASSEMBLY ZIIIP 120, ZIIIP LARGE**



The cassette must be mounted on the mounting clips provided. Alternatively, it may be drilled in the middle of the cassette and fixed with screws adapted to the substrate. Care must be taken here to ensure that the screws do not interfere with system components (e.g. fabric, etc.).

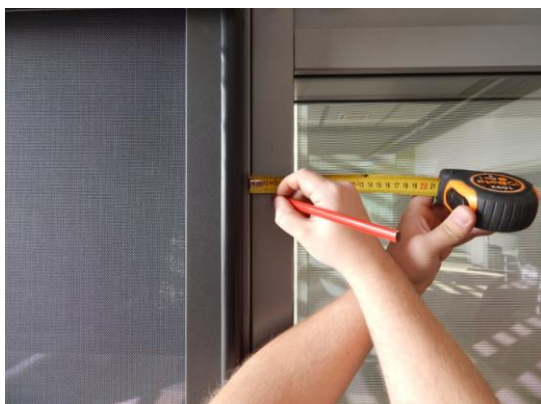


Photo 1



Photo 2



Photo 3



Photo 4

1. Determine where to mount the guides or bracket directly.

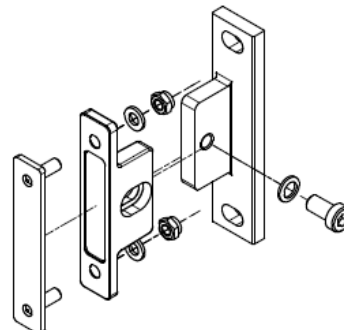
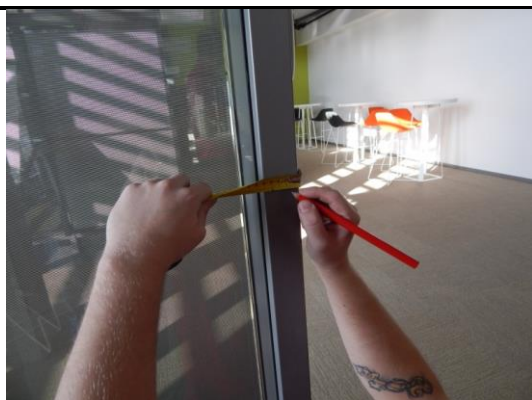


Fig. 1 Handle

2. Drill holes for fixing screws.

3. Adjust guide plumb.

4. Fix the guides to the floor.



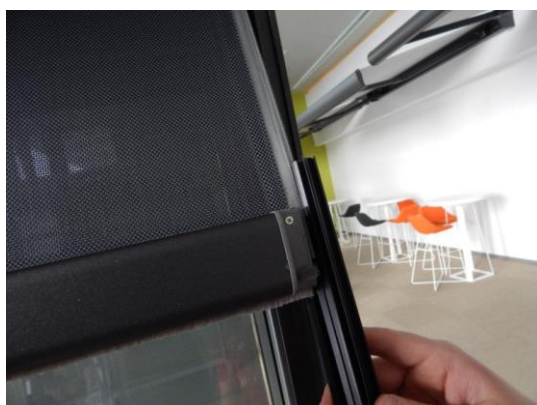
- Determine the installation location for the second guide, repeat the steps as for the installation of the first guide.

Photo 5



- Place the cassette assembly on the guides.

Photo 6



- Slide the guide profile onto the lock.

Photo 7

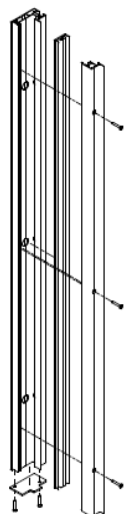
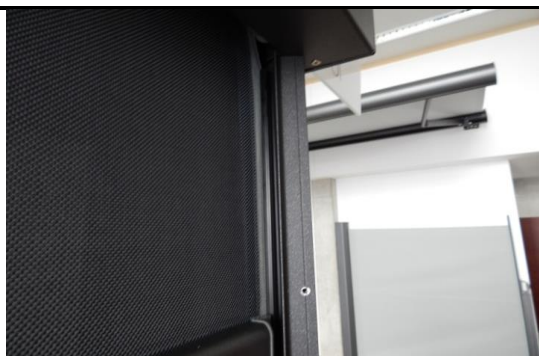


Fig. 2

- Figures 2 and 3 show the sequence and assembly of the guide assembly components and their positioning relative to each other.



Fig. 3



9. Insert the guide profile into the guide profile, then insert the guide revision profile.

Photo 8



10. Tighten the screws securing the rail.

Photo 9



3. Check that the handles are securely fastened - dislodging them can pose a danger to people.
4. After installation, check the correct operation of the product, set the end positions in accordance with the motor operating instructions.

#### 4.5.4. MOUNTING REFLEKSOL ZIIIP 120 BOX

##### a) Installation guidelines.

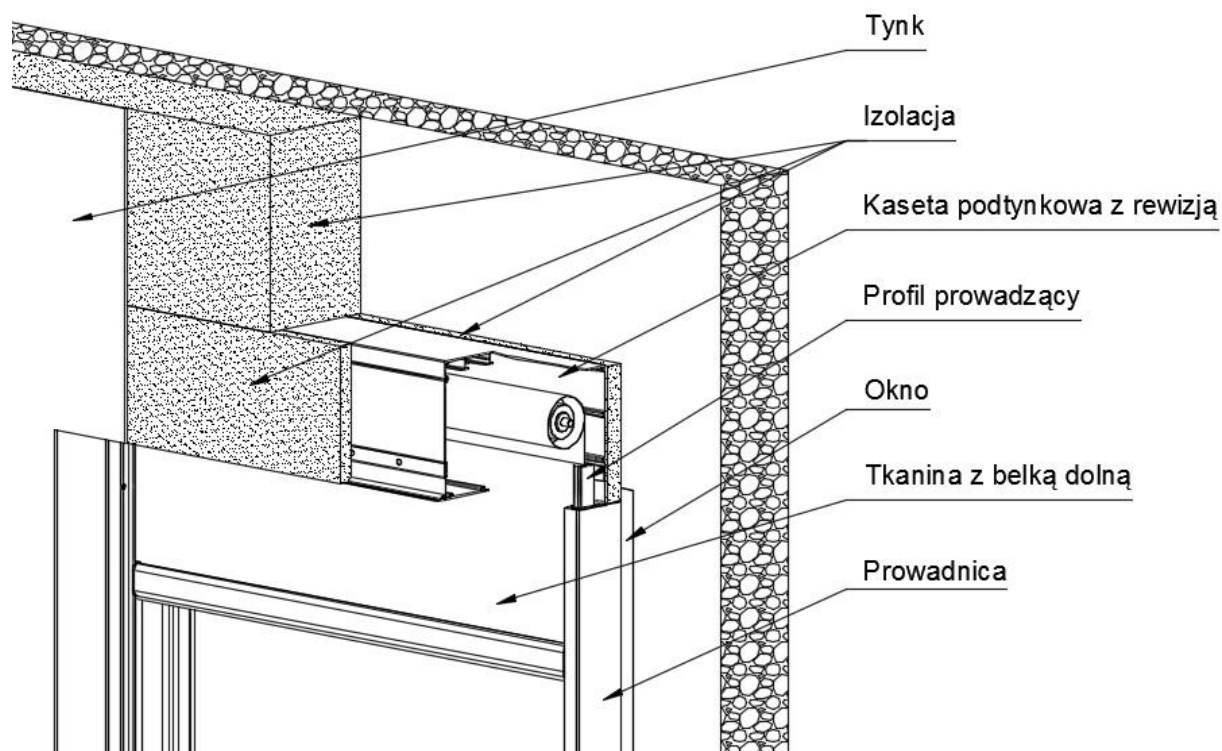


Fig. 4. Diagram of Refleksol Ziiip 120 BOX - with flush-mounted cassette.

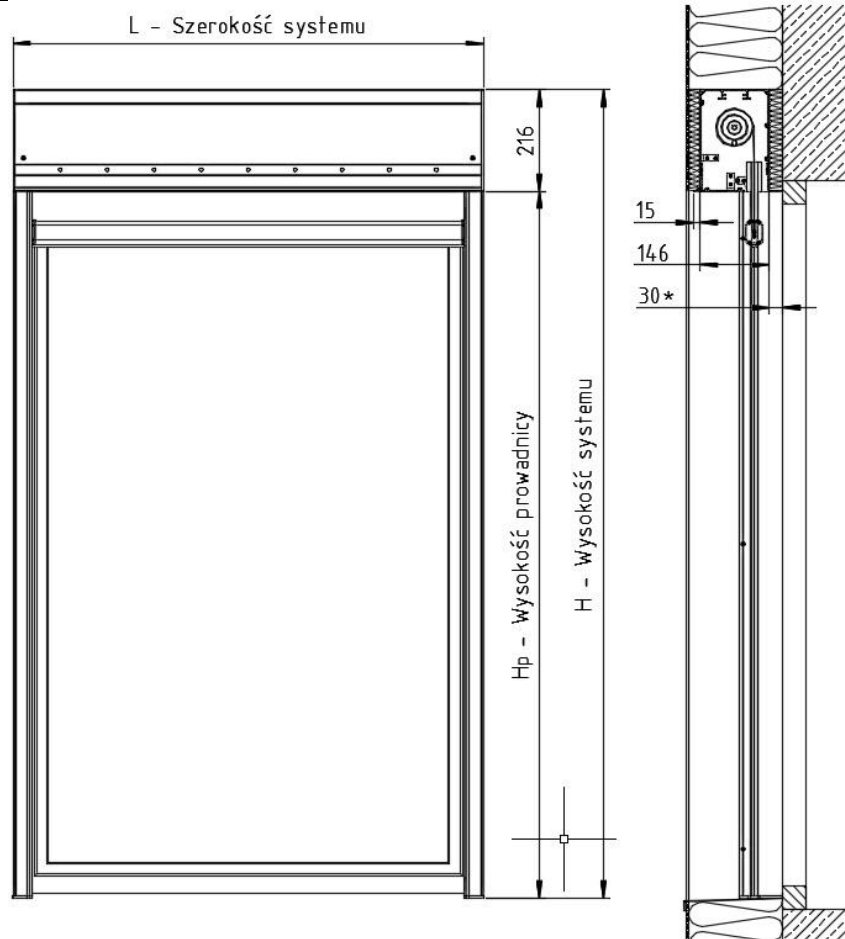
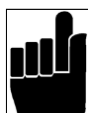


Fig. 5 Dimensions of Refleksol ZiiiP 120 BOX - with flush-mounted cassette. \* - variable dimension, 30 mm as standard.

**Guidelines for flush-mounted cassette installation:**

- The flush-mounted cassette is delivered without pre-drilled mounting holes. These must be drilled yourself in accordance with the instructions below (Fig. 8). A minimum of 3 mounting holes are required for every 1 m of cassette length.
- For flush-mounted cassette installation, it is recommended to use washers with an enlarged outer diameter to avoid deformation of the cassette.
- The flush-mounted cassette is supplied without a pre-drilled hole for the control cable-. You will need to make this hole yourself in accordance with the following instructions. Drill a  $\varnothing 13$  hole in the side of the cassette and fit the supplied cable gland into this. Feed the control cable through the gland -into the cassette.
- The profiles: guide and guide revision are supplied without pre-drilled mounting holes. These must be drilled by yourself according to the following instructions (Fig. 9). A minimum of 3 mounting holes are required for each 1 m length of the guide profile. When drilling the mounting holes in the guide, remember to remove the guide profile.
- The length of the installed guide profile in the guide is equal to the full height of the ZiiiP 120 BOX system minus 150 mm.
- The flush mounting is shown in Fig. 6a, the recess mounting is shown in Fig. 6b.
- The design of the guide is shown in Figure 7.
- The mounting of the guide profile must ensure that it is immovably mounted to the substrate and that it is linear and perpendicular to the ZiiiP system<sup>BOX</sup>.
- The guide profiles must be installed parallel to each other in all planes.



SELT Sp. z o.o. is not responsible for the incorrect operation of the Refleksol system with the runner if the substrate does not ensure the straightness and parallelism of the runner profile installation.



a) Montaż dokienny

b) Montaż wnekowy

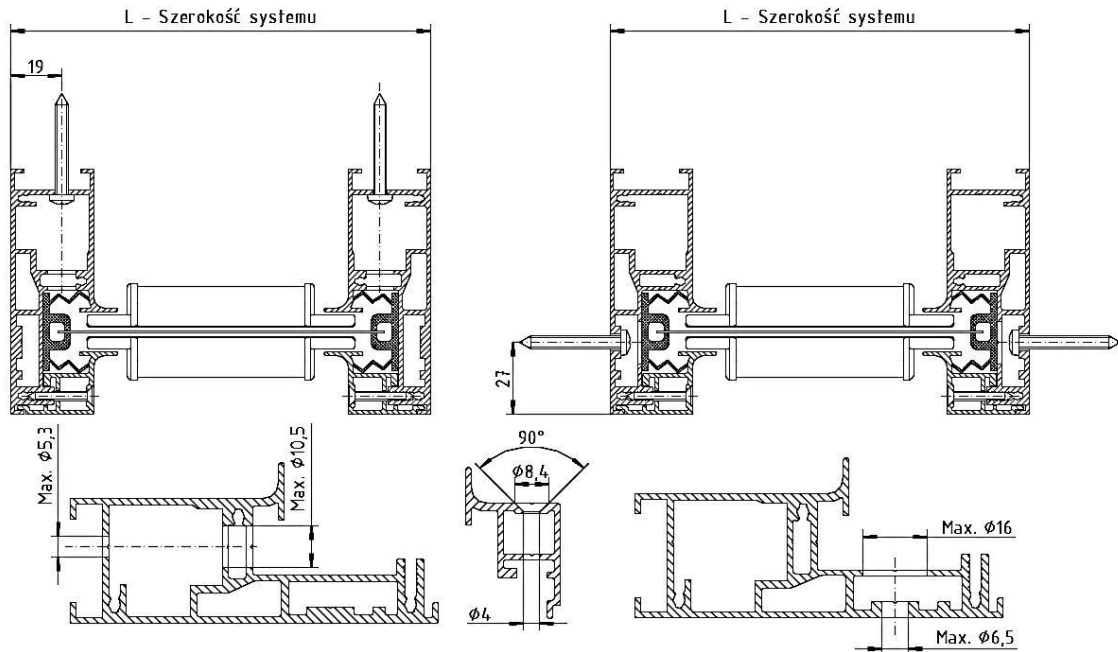


Fig. 6. Ways of mounting the guide: a) - Flush mounting b) - Recessed mounting.

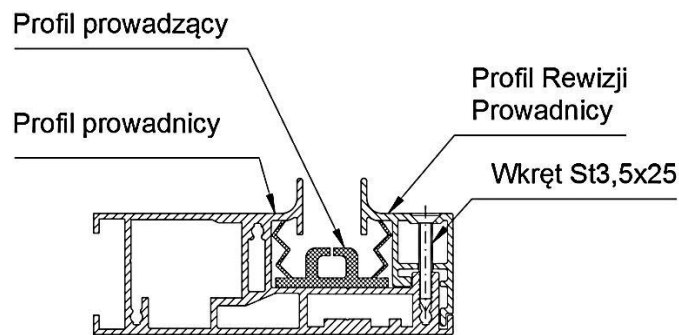


Figure 7: Construction of the guide.

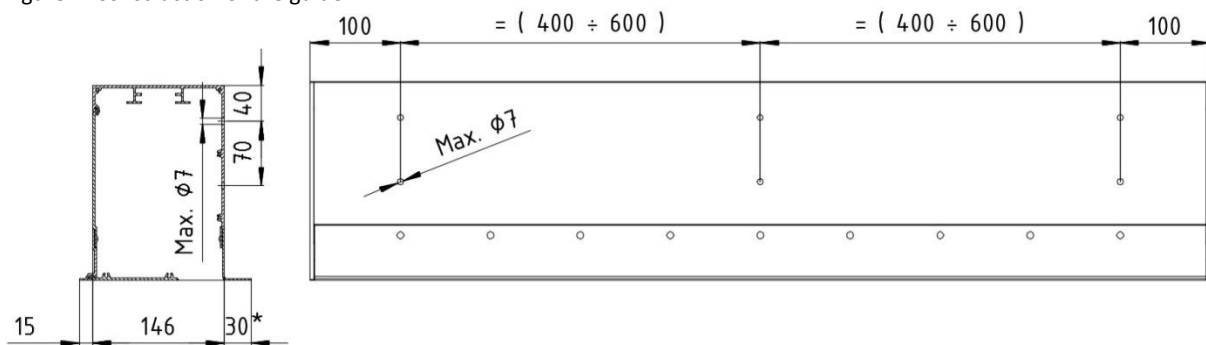


Fig. 8. Scheme for making mounting holes in a flush-mounted cassette. \* - dimension variable, standard 30 mm.

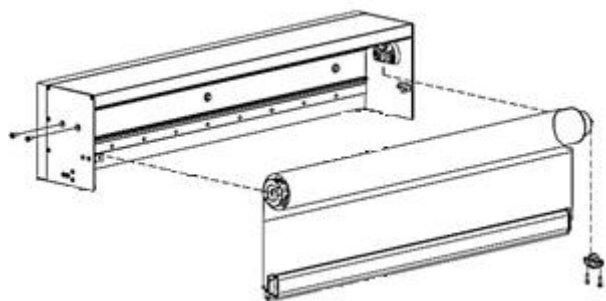


Fig. 9. Diagram for drilling the mounting holes in the guide profile and the guide revision profile.

b) Method of assembly.



Before installing the flush-mounted cassette, it is essential to remove the winding tube and fabric from the cassette and store it for the duration of the cassette installation, protecting it from damage during storage.



1. Remove the winding tube together with the fabric and the bottom bar from the BOX cassette.

Fig. 10A



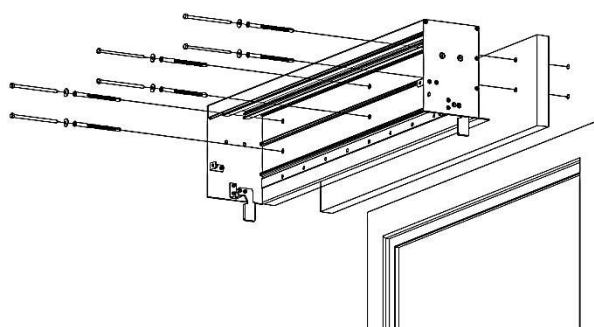
2. Measure and mark out the locations for the mounting holes of the flush-mounted cassette.

Photo 1



3. Drill the mounting holes for the flush-mounted cassette.

Photo 2



4. Drill mounting holes in the flush-mounted tray in accordance with Fig. 8.
5. Fit the flush-mounted cassette to the facade.

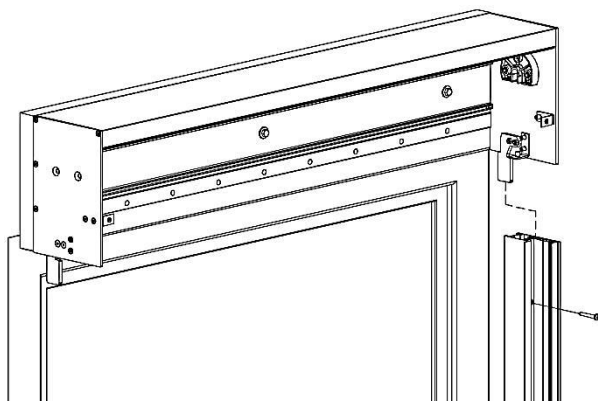
**NOTE:** Insulation (e.g. polystyrene, etc.) 30 mm thick must be installed under the cassette. Non-compressible spacers must be installed in the insulation layer on the studs.

Fig. 10



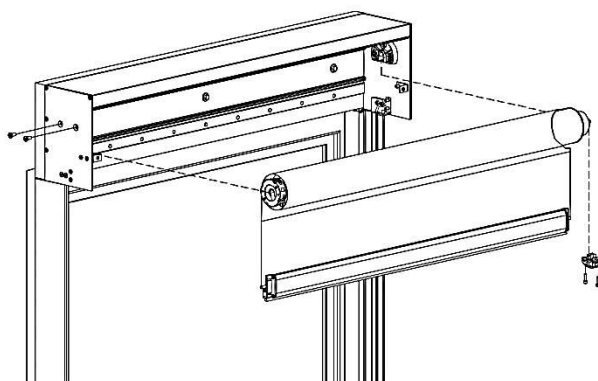
- Determine and then drill the mounting holes in the guide profile and the guide revision in accordance with as shown in Fig. 9.

Photo 3



- Fit the guide to the flush-mounted cassette and fix it to the floor or substructure.

Fig. 11



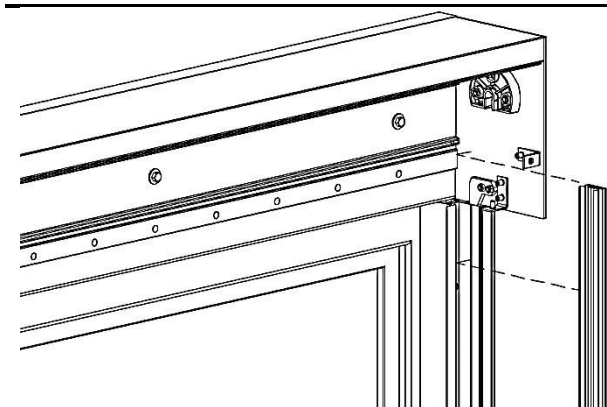
- Install the winding tube together with the fabric and the bottom bar in the flush-mounted cassette.

Fig. 12



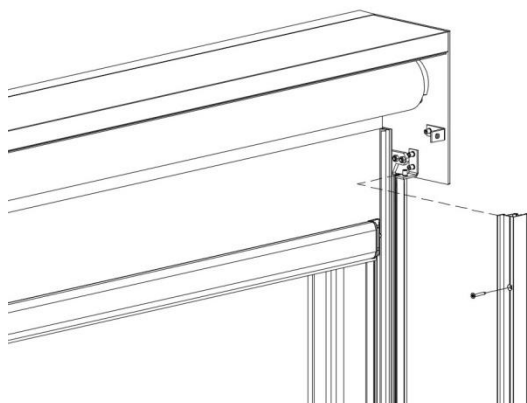
- Slide the guide profile onto the lock on the edge of the fabric and place with the fabric into the guide profile. In accordance with picture 4 and Fig. 12.

Photo 4



10. Fit the guide profile into the guide profile.

Fig. 13



11. Fit the guide revision profile onto the guide profile. According to Fig. 14 and 15.

Fig. 14

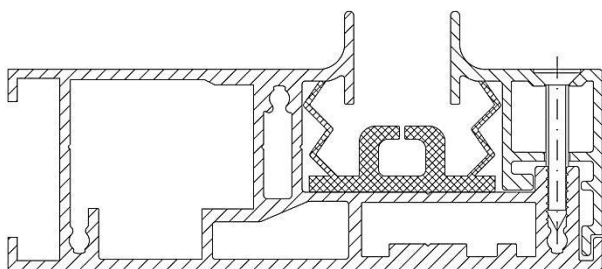
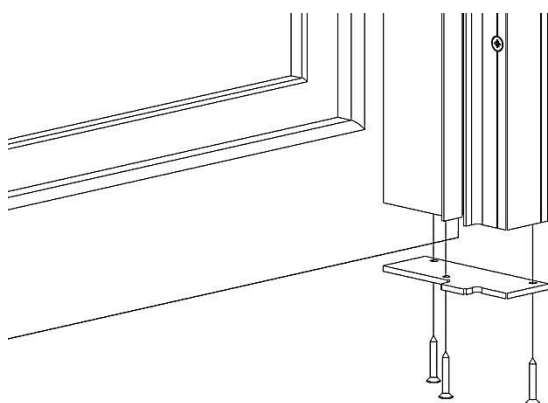
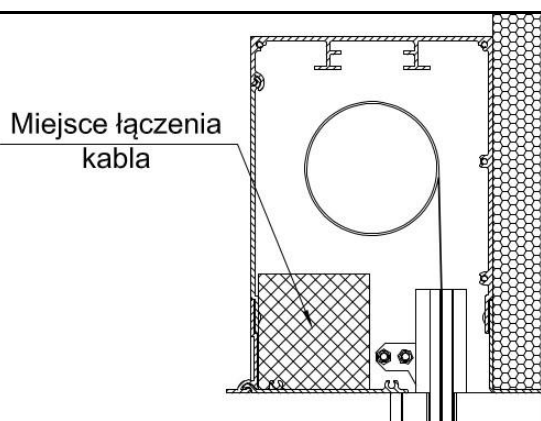


Fig. 15



12. Fit a guide cap on the lower end of the guide.

Fig. 16

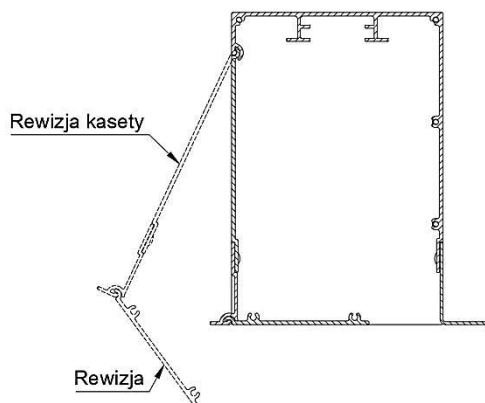


13. Connect the power and control cable and check the correct operation of the system and the setting of the limit switches. Make any necessary corrections.

**NOTE:** Place the power and control cable connection in the indicated area of the cassette in a way that allows correct service work. The cable should be laid in such a way as to prevent water entering the motor.

The power and control cable must be routed through the side of the cassette.

Fig. 17



14. Fit cassette revision to flush-mounted cassette and revision in accordance with Fig. 17, 18 and 19.

Fig. 18

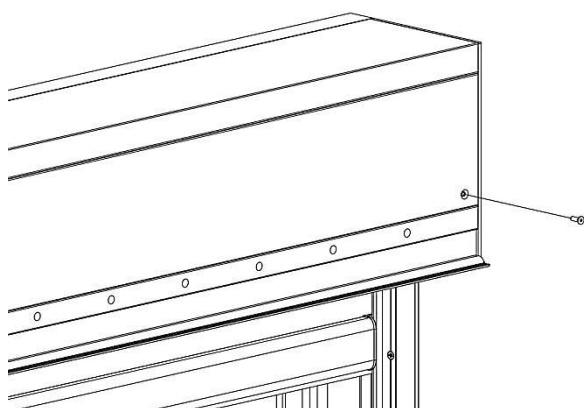


Fig. 19

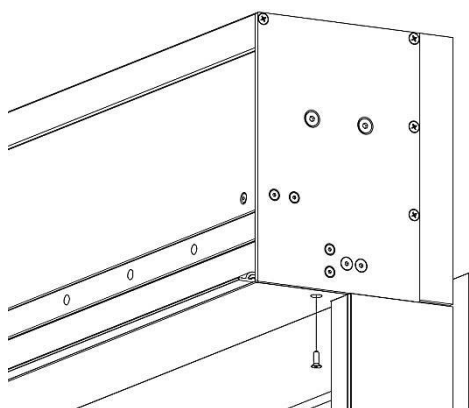


Fig. 20



Secure the guide profile and cassette as well as the fabric with the bottom beam during the insulation and plastering work. Take special care not to contaminate the guide profile and the fabric and bottom beam in the concealed cassette.

## 4.6. ELECTRIC DRIVE

### 4.6.1. CONNECTION TO THE ELECTRICAL SYSTEM

Once the product has been installed, the drive and control system should be connected to the previously prepared power and control wiring. The connection to the electric supply system should be made on the basis of a previously prepared individual wiring diagram, taking into account the principles of anti-shock protection. The connection must be made by an electrician with electrical qualifications.

The electrical connection and adjustment of the motors must be carried out in accordance with the motor manufacturers' instructions.

The instructions are enclosed with the product and are also available on the motor manufacturers' websites:

[www.selt.com](http://www.selt.com) → OUR OFFER → AUTOMATION

#### **Environmental conditions with increased risk:**

Hazardous environments include bathrooms and showers, kitchens, garages, cellars, saunas, pet enclosures, hospital operating theatres, hydrothermal pumps, heat exchangers, spaces enclosed by conductive surfaces, camping sites, open areas, etc.

In rooms and spaces where there are conditions of increased risk, automatic devices should be used to switch off the power supply to the faulty product, e.g. residual current circuit breakers. Recommended for use in bathrooms, kitchens, garages and cellars. It is compulsory to use around swimming and shower pools, saunas, on construction sites, when supplying power to outdoor equipment, on agricultural and horticultural farms, in camping and leisure vehicles and in rooms at risk of fire.

### 4.6.2. COMMISSIONING AND ADJUSTMENT

- The end positions (up and down movement of the air curtain) are protected by limit switches, which must be adjusted during installation.
- Adjustment of the limit switches must be carried out in accordance with the motor installation instructions.
- Electrical measurements must be taken before commissioning the product.
- Do not start the engine without checking that the system is fitted correctly.

#### **When commissioning the product, particular attention should be paid to:**

- correct unrolling and rolling of the cover,
- correct tripping of limit switches.



Incorrect connection of the motor can damage the product or create a hazard.



The motor is fitted with a thermal cut-out that will switch off the drive after approximately 4 minutes of continuous operation to protect against overheating. After being switched off by the thermal protection, it is necessary to wait a suitable time depending on the type of motor and the ambient temperature (approximately 16 minutes) to be able to restart it.

## 5. SYSTEM OPERATION AND PRODUCT SAFETY

### 5.1. GENERAL HEALTH AND SAFETY REQUIREMENTS

- During transport, assembly and disassembly, as well as during handling, care and maintenance of the product, health and safety and environmental protection regulations must be observed.
- The product should only be maintained and repaired by trained and authorised persons.
- The purchaser of the product should ensure that persons entrusted with the day-to-day use, hygiene and maintenance of the product are familiar with the operating instructions and observe the instructions in all points.
- It is not permissible to clean the product in any way other than that described under "Inspection, maintenance, repair".
- All work must be carried out with due care taking into account safety requirements.
- Maintenance work and product repair should only be carried out when the product is disconnected from the electricity supply.
- Observe the markings on the product (e.g. pictograms, arrows indicating the direction of movement).
- Care must be taken to ensure that the markings are not covered by a layer of paint or damaged in such a way that they cannot be read.



- Modifications to the electrical design or changes to the configuration of the fittings may not be made without consulting the manufacturer or an authorised representative.
- Before using the product, read this documentation carefully.
- The switch should be mounted at a height that complies with national regulations for people with disabilities, preferably at a height of less than 130 cm.

## 5.2. SAFETY REQUIREMENTS RELATED TO SPECIFIC CONDITIONS AND PLACES OF USE OF THE PRODUCT.

The special safety requirements apply, for children up to the age of 42 months. The special use requirements apply in all places where young children have access to or are likely to be. The special requirements for use also apply in all places where people with disabilities are present.



Before using the product, it is up to the Purchaser to carry out an individual risk assessment of its use with particular regard to the safety of children and people with disabilities.

When determining the performance requirements of a product, it is important to consider reasonably foreseeable conditions of use and potential hazards.

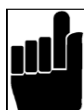


Do not allow children to play with the controls of the external curtain.  
Keep the remote control device away from children.



Frequently inspect the installation for signs of wear or damage to the cables.  
Do not use if repair is necessary.

## 5.3. OPERATING SAFETY



The product may only be used if there are no defects.

### Recommendations and actions:

- The product is safe to use provided that the recommendations in the documentation are followed.
- Disconnect the product from the power supply before carrying out any work, unrelated to the maintenance and hygiene of the product, on the building façade.
- All work related to the inspection and repair of the product should be carried out by a suitably trained person with the required authorisations.
- look out for any signs of wear or damage to electrical cables,
- if you notice signs of wear or damage to the electrical cables, do not use the product and immediately report the fault to the supplier.
- Keep remote control devices out of the reach of children,
- Entering and remaining in the operating area of the up-down system should only be done when the system is fully open and stopped,
- when lowering the curtain of the product, particular attention must be paid to ensure that no object or person is in the working area of the product (in the space between the guides and the front beam),
- contact of the air curtain with hot objects (e.g. heaters, cookers, irons, etc.) should be avoided.

### Prohibited activities

- Do not forcibly pull the system upwards! This can cause damage to the system!
- Do not stay in the working area of the air curtain while the system is in operation.
- It is forbidden to use a product that does not comply with shock and fire safety requirements.
- It is forbidden to exceed the product operating parameters specified in the technical and operating documentation.
- It is forbidden to keep any sharp objects or protruding parts near the system, which may snag on the bottom bar.
- It is forbidden to use a defective or incomplete product (e.g. without a switch etc.). Use of such a product may cause damage to the product and endanger the health and life of the user.
- It is forbidden to carry out makeshift repairs,
- It is forbidden to use the product and the electrical installation without valid and required inspections and measurements,

- It is forbidden to remove the covers of the drive train and the electric motor.
- Do not touch moving parts when retracting or unrolling. This can result in crushing, cutting, pulling in or jamming between, for example, the bottom beam and other structural components of the system.
- There should be no obstacles within the operating area of the system that could interfere with its operation or cause damage. In the event of the roller shutter running into an obstacle, the curtain should first be rolled up slightly and then the obstacle removed.
- Do not stay in the product's moving area while it is in operation.

Automatically controlled products may start up on their own. Make sure that no dangerous situation arises.

**SELT Sp. z o.o. is not responsible for damage caused by improper use.**



**WARNING !**

Operating the system out of sight can cause serious injury as well as damage to the system



Do not use the product in strong gusts of wind, snow, freezing rain as the product may be damaged or destroyed and may endanger persons in the vicinity (applies to products installed outdoors).

**OPERATION IN FROSTY CONDITIONS MAY CAUSE DAMAGE TO THE PRODUCT**

In the event of any malfunction of the product, the Supplier of the product must be notified immediately. Using a defective product and attempting repairs yourself poses a risk to health and life and may void the warranty.

#### 5.4. CONTROL OF SAFE USE OF THE PRODUCT

**The purchaser should:**

- a) where the safe use of the product depends on the conditions under which it is installed, subject the product to:
  - initial inspection (after it has been installed and before it is put into service for the first time),
  - control when installed elsewhere.
- b) ensure that a product exposed to conditions causing deterioration of its technical condition, which may result in dangerous situations, is subjected to:
  - periodic inspections as well as examinations,
  - special checks in the event of possible deterioration of product-related safety as a result:
    - modification work,
    - natural phenomena,
    - extended standstill time,
    - dangerous injuries and accidents at work.

The above-mentioned checks can be carried out by specialised installation groups with the appropriate qualifications.



## 6. USE AND MAINTENANCE OF THE PRODUCT

### 6.1. INTENDED USE OF THE PRODUCT

The product must be used in accordance with its intended use as specified by the manufacturer. If the product is operated and modified in a manner other than that described in this documentation, it is used incorrectly. Unauthorised changes affecting the safe operation of the product are not permitted.

Proper use of the product includes:

- Normal use or foreseeable use that does not include, for example, risks taken by the user intentionally or knowingly.
- Application of permissible operating values.
- Adherence to operating recommendations.
- Carry out periodic inspection and maintenance of the product.
- Compliance with the requirements set out under "Controlling the safe use of the product".
- Data included under 'Technical specifications'.

In case of misuse:

- The product may endanger operators.
- The product will be exposed to damage.
- This can have a negative impact on its functionality.
- Do not use the product during maintenance work (e.g. window cleaning).

### 6.2. INSTRUCTIONS FOR NON-EXPERTS

Before using the product, read this documentation carefully.

Non-professionals are persons entrusted by the Purchaser with the day-to-day use, hygiene and maintenance of the product.

A thorough knowledge of the documentation guarantees fault-free operation of the product.

List of activities that can be performed by non-experts:

- ongoing service:
  - performing activities that do not alter the performance of the product,
  - switching on and off by pressing the control buttons,
- maintenance of the product is described in the following section.

### 6.3. TECHNICAL INSPECTIONS, MAINTENANCE AND REPAIRS

Periodic inspection of the products by specialised installation teams is recommended.

Maintenance consists of checking the operation of the product, adjusting the mechanisms and replacing components that wear out during operation. Ongoing maintenance of the system is carried out by the user himself. Maintenance of the product should be carried out at least once a year by specialised installation teams.

Reviews are carried out against payment.

#### Basic activities performed during the review:

- Check:
  - fixing the product to structural elements,
  - the technical condition of the moving parts of the product,
  - the condition of the product's electrical wiring and checking its connection to the electrical system,
  - bolted and riveted connections,
  - the technical condition of the curtain, guides and seals,
  - attachment of the product's drive mechanism (motor),
  - effectiveness of the residual current circuit breaker.
- Possible adjustment and improvement of the fixing of listed components.

The products manufactured by SELT Sp. z o.o. do not require special maintenance. The use of the product in accordance with the manufacturer's recommendations ensures long-term and fault-free operation of the system for the user. Ongoing maintenance work should be carried out on the maximally developed system.

#### Basic operations including maintenance of the product:

- Checking that the curtain is correctly unrolled and rolled up,
- Check for correct operation of limit switches,
- Cleaning of visible, accessible parts of the product.

**Cleaning of metal / aluminium components:**

- It is recommended to clean light soiling of metal / aluminium surfaces with water and mild detergents.

**Prohibited activities during product maintenance:**

- The use of pressure washers as well as cleaning agents and solvents is prohibited.
- It is forbidden to use cleaning agents with chlorine, ammonia, paraffin, acetone and bleach to clean the system as well as in its vicinity, as this will result in the risk of corrosion.
- The use of sharp tools (e.g. wire brushes), cleaning agents that cause scratches (e.g. scouring powders, pastes) is prohibited.
- Do not firmly hold or pull the system or its individual components.
- Do not replace damaged components with substitutes! Replacement parts should be original!

**7. GENERAL WARRANTY CONDITIONS**

The general warranty conditions are available at [www.selt.com](http://www.selt.com). If you do not have access to the SELT Sp. z o. o. website, the warranty conditions can be obtained from your SELT Sp. z o. o. sales representative.

**7.1. WARRANTY EXCLUSIONS:****The guarantee does not cover:**

- Damage caused by transport other than SELT.
- Damage resulting from storage, installation or maintenance not complying with the technical and operating documentation or the Supplier's recommendations, unless these activities were carried out by and at the Supplier's risk.
- Damage caused by use not in accordance with the technical and operational documentation or the Supplier's recommendations.
- Mechanical damage.
- Damage resulting from the alteration of the equipment, unless the alteration has been carried out by the Supplier, on his instructions or with his written consent.
- Secondary damage resulting from the use of the equipment despite the perception of the original defect, unless the Supplier has been notified and has recommended further use. The assessment of the causes of damage shall be left to the Supplier's reasonable discretion. Repair or replacement of the device due to the damage referred to in this section may be carried out by the Supplier against payment.
- Defects resulting from normal wear and tear of product parts such as seals, lubricants, etc.
- Repairs involving adjustments, cleaning and lubrication.
- Electrical equipment that has been handed over to the Supplier in a way that makes it impossible to check its operation (e.g. cut motor cable, receiver disassembled).
- Damage caused by: incorrect installation of the product, unauthorised repair or adjustment.
- Damage caused by using the system in inappropriate weather conditions.
- Operating the system despite component damage.
- The RAL 7016 matt paint used by SELT Sp. z o.o. has Qualicoat approval no. P-1281, and is used in accordance with the product technical sheet. The paint is specially selected to be very flexible - which is necessary in our production process - and thus softer, and scratches may be visible on its surface as a result of transport or use of the painted elements - which is unavoidable.

**The sheathing warranty does not cover:**

- Horizontal indentations on the fabrics, which are created by the pocketed rod holding the fabric in the winding tube.
- Asymmetrical winding of the fabric on the winding tube can occur as a result of the fabric not being centred during installation.
- Unsymmetrical winding of the fabric on the winding tube due to the occurrence of coarsening and dirt on the fabric surface (e.g. leaves, mud, etc.).
- Elastic response of the fabric when operating in different temperature ranges (related to the thermal expansion of PVC).
- "Herringbone" of the fabric in the centre of the roller blind, resulting from the deflection of the roller tube.
- Shrinkage occurring at the seams of the fabric, resulting in vertical stresses on the fabric surface ("vertical waves").
- Damage caused by abnormal weather conditions, lightning.
- Damage resulting from accidents and unexpected events (e.g. hurricane, tornado, etc.).
- Damage resulting from inadequate cleaning with corrosive and abrasive products or by using inappropriate tools.
- Atmospheric and phytosanitary pollution.
- Influence of other products or objects hanging on the fabric not related to the Selt system.

- Differences in the shades of the fabrics and, in the case of metallic-coloured fabrics, the degree of metallisation of the material resulting from different production batches.
- Fabric curling: covers at larger sizes, exceeding the width of the beam, have to be made from welded lumps, which are additionally turned. As a result, the fabric in some cases curls up at the edges. The reason for this is that the fabric remembers the beam shape of the whole fabric. The described behaviour of the fabric may intensify for roller blinds with a large height and a width of less than 120 cm. This effect subsides with time of use and is not a defect of the system.
- Breaks in the weld: for sheathing wider than 4,300 mm, i.e. exceeding the length of the welder, it is necessary to make a pocket cut. The notch hides in the bottom beam, so it is hardly noticeable and in no way affects the characteristics of the sheathing. This is a technological standard.
- Fabric seams: when the width of the product exceeds the width of the fabric bale, then it is necessary to join two pieces of fabric by means of joints called seams. The fabric joints are repeated vertically at a frequency depending on the width of the bale of fabric selected.
- In the ZiiiP system covers, there may be some waviness of the fabric visible at the guides. This phenomenon is caused by the lock, which deforms the fabric when the roller blind is rolled up. The effect of the fabric rippling intensifies the longer the system is rolled up.

## 8. COMPLAINTS/TECHNICAL DEFECTS

### 8.1. COMPLAINTS

Complaint procedure:

- A complaint must be made in writing at the point of sale where the product was purchased.
- The condition for accepting a complaint is that the contract, order or invoice number is quoted and that the complaint is submitted in writing together with the guarantee card.
- The notification should include a detailed description of the defect, the name of the company that installed the product and the date on which the defect was found.

**Goods without a stated invoice number, order number or contract number will be considered as post-warranty goods.**

### 8.2. TECHNICAL DEFECTS

In the event of system defects, you should:

- Roll up the blind and take it out of service.
- Immediately report a product defect to the Seller.
- Applications can be sent to the e-mail box [reklamacje@selt.com](mailto:reklamacje@selt.com) or directly to the sales representative.

Notification of a technical defect/complaint must be made in writing on the "claim form", which can be found at [www.selt.com](http://www.selt.com) or directly to the account manager. Disassembly / disposal / decommissioning of the product

9. DISMANTLING / DISPOSAL / DECOMMISSIONING OF THE PRODUCT



Improper disassembly of the system can cause serious injury and damage to the system. The dismantling of the system should be carried out by a suitably specialised installation team or a person with appropriate health and safety training and recovery expertise.

a) Disposal of waste electrical and electronic equipment

Important information on disposal:



According to the provisions of the Act of 11 September 2015 on waste electrical or electronic equipment, it is prohibited to place together with other waste used equipment marked with the symbol of a crossed-out municipal waste container. A user wishing to dispose of electronic or electrical equipment is obliged to take it to a waste equipment collection point.

These statutory obligations have been introduced in order to limit the amount of waste produced from waste electrical and electronic equipment and to ensure an adequate level of collection, recovery and recycling. The equipment does not contain hazardous components that have a particularly negative impact on the environment and human health.

Lp.	Subject	European legal basis	Polish Legal Basis
1	Waste electrical and electronic equipment	Directive 2012/19 EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE)	Act of 11 September 2015 on waste electrical and electronic equipment (Journal of Laws 2015, item 1688)
2	Waste catalogue	Commission Regulation (EC) No 574/2004 of 23 February 2004 amending Annexes I and III to Regulation (EC) No 2150/2002 of the European Parliament and of the Council on waste statistics	Regulation of the Minister of the Environment of 29 December 2014 on the waste catalogue (Journal of Laws 2014, item 1923)

b) Disposal of used batteries

In accordance with the provisions of the Batteries and Accumulators Act of 24 April 2009, the **end user** is obliged to hand over used portable batteries that are no longer a source of energy to a waste battery **collector** or collection point. It is prohibited to place used batteries together with other waste in the same container.

In order to prevent contamination of the environment and the possible risk to human and animal health, the used battery should be disposed of in a suitable container at designated collection points.

Lp.	Subject	European legal basis	Polish Legal Basis
1	Used batteries and accumulators	Directive 2006/66/EC of the European Parliament and of the Council of 6 September 2006 on batteries and accumulators and waste batteries and accumulators and repealing Directive 91 / 157 / EEC	Act of 24 April 2009 on batteries and accumulators (Journal of Laws 2009 No. 79 item 666)

**10. CE MARKING AND LABELLING OF THE PRODUCT**


**10.1. CE CONFORMITY OF THE PRODUCT**


The products manufactured by SELT meet the essential requirements of the standard introduced by the Polish Committee for Standardisation as PN-EN 13561, which is confirmed by the manufacturer's Declaration of Product Characteristics and the CE mark, as well as the EN13120 standard (for interior products).

To maintain this condition and to ensure safe use and maintenance of the system, the instructions for installation, operation and safe use must be followed.


**10.2. INFORMATION ACCOMPANYING THE CE MARKING**


**a) Labelling on the product:**


SELT Sp. z o. o. Opole, 23A Wschodnia St.
EN 13561


SELT Sp. z o. o. Opole, 23A Wschodnia St.
2006/42/EC

**b) Labelling on accompanying documents:**


SELT Sp. z o. o. Opole, 23A Wschodnia St. POLAND 15 (17-for ZiiiP BOX)
<p style="text-align: center;">EN 13561</p> <p style="text-align: center;">REFLEXOL ZiiiP120. 400x400 Sunshade for outdoor use (including built-in version) Wind load resistance: class 6 Integ. Transmission coefficient solar energy g tot: 0.01-0.90* <b>TWO 52 / RZ / 2019</b></p> <p style="text-align: center;">REFLEXOL ZiiiP BOX. 400x400 Sunshade (BOX1 &amp; BOX2 version) for outdoor use Wind load resistance: class 6 Integ. Transmission coefficient solar energy g tot: 0.01-0.90* <b>TWO 46 / RZ / 2019</b></p>
<p>* - external blind with reference glazing type C according to EN14501:2005; detailed data depending on the fabric model are tabulated on the manufacturer's website</p>


SELT Sp. z o. o. Opole, 23A Wschodnia St. POLAND 18
<p style="text-align: center;">REFLEXOL ZiiiP Large. 500x300 Sunshade for outdoor use Wind load resistance: class 4 Integ. Transmission coefficient solar energy g tot: 0.01-0.90*  <b>TWO 89A / RZ / 2019</b></p>
<p>* - external blind with reference glazing type C according to EN14501:2005; detailed data depending on the fabric model are tabulated on the manufacturer's website</p>



SELT Sp. z o. o.  
Opole, 23A Wschodnia St.  
POLAND  
17

EN 13561

REFLEKSOL ZiiiP 95 270x300  
Sunshade for outdoor use  
TWO 51A/RZ/2018

Essential characteristics	Performance characteristics		Harmonised technical specification
	Bottom beam FG51	Bottom beam FG51-02	
Wind load resistance	Class 6 (480 Pa)*	6 class (480 Pa)**	EN 13561:2015
	Breaking load* 1500 Pa (for 300x300 cm) 2000 Pa (for 250x250 cm)	Breaking load** 770 Pa (for 300x300 cm)	-
Total solar factor	0,01-0,90***		EN 13561:2015

\* - external blind with reference glazing type C according to EN14501:2005; detailed data depending on the fabric model are tabulated on the manufacturer's website

CE	CE	CE
SELT Sp. z o. o. Opole, 23A Wschodnia St. POLAND 15	SELT Sp. z o. o. Opole, 23A Wschodnia St. POLAND 18	SELT Sp. z o. o. Opole, 23A Wschodnia St. POLAND 17
Roll-up curtain (reflexol) exterior REFLEKSOL ZiiiP120 REFLEKSOL ZiiiP120 recessed version 230V/ 50 Hz Power 120 to 145 watts 03/ DZ/2018	Roll-up curtain (reflexol) exterior REFLEKSOL ZiiiP Large  230V/ 50 Hz 170 W 03/ DZ/2018	Roll-up curtain (reflexol) exterior REFLEXOL ZiiiP95 230V/ 50 Hz Power 80 to 130 watts 03/ DZ/2018  Roll-up curtain (reflexol) exterior REFLEKSOL ZiiiP <sup>BOX</sup> 230V/ 50 Hz Power 120 to 145 watts 03/ DZ/2018