

# Operation and maintenance manual



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

## 1. Intended use

**NOTE !!! This manual is intended for the roller shutter user. Please read it before using the roller shutter for the first time. It contains the information necessary for safe operation and proper maintenance of a roller shutter. Please keep this manual for the entire period of use of the roller shutter. In the case of the sale of the roller shutter please pass it with this manual.**

The roller shutter is designed for use in architecture in order to provide additional coverage and/or protection of a building's opening (e.g. window, door), it is used in residential, public utility or manufacturing buildings which are under construction or existing buildings. Roller shutter profiles are made of high quality aluminium sheet. This sheet is double-lined with PUR PA lacquer and shows an increased resistance to abrasion and the weather effects. The filling foam provides the profiles with good thermal and acoustic insulation parameters. One of the options includes the use of a mosquito net enclosed in the shutter box (MKT system). An integrated system ensures the independent operation of the roller shutters and mosquito net.

Roller shutter systems can be divided in the following manner:

- **due to the location of the shutter box:**

- **adapting systems** designed for use in existing buildings.  
The roller shutter is rolled into an aluminium box installed on the wall or in the window's recess.

Types of adapting systems:

Fig.1) **SK**



Fig.2) **SK + MKT**



Fig.3) **SKP**



Fig.4) **SKP + MKT**



Fig.5) **SKO-P**



Fig.6) **SKO-P + MKT**



Fig.7) **SKO**



Fig.8) **SKO + MKT**



- **under plaster systems** - designed for use only in buildings under construction and also in already existing objects. The roller shutter is rolled into aluminium box placed under the plaster.

Types of under plaster systems:

Fig.9) **SP-E**



Fig.10) **SP-E + MKT**



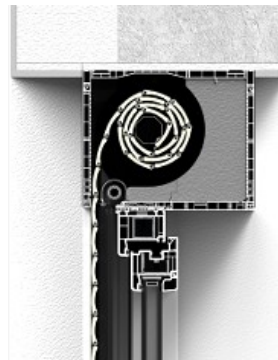
- **top-mounted systems** - designed for use in buildings under construction and also in already existing objects. The roller shutter is rolled into the plastic box mounted above the window.

Types of top-mounted systems:

Fig.11) **SKB**



Fig.12) **BeClever**



- due to the operation of the shutter box:

- manual - the roller shutter is rolled up with one of the mechanisms

Fig.13) **Outside strap box coiler**



Fig.14) **Spring**



Fig.15) **Handle**



- electric

- the roller shutter is rolled up by an electric motor controlled by for example:

Fig.16) **Rocker switch**



Fig.17) **Key switch**



- radio

- the roller shutter is rolled up by an electric motor controlled by radio device such us for example:

Fig.18) **Remote**



Fig.19) **Timer**

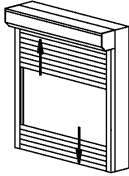
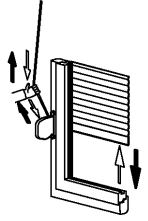


## 2. Operation and maintenance

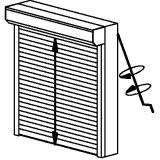
The roller shutter and its components have been designed so that no part of it has been permanently deformed during normal use.

### Operation of roller shutters with manual drive

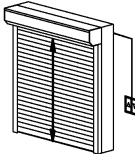
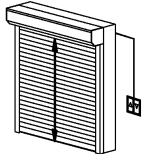
#### Outside strap box coiler / rope

Roller shutter opening / closing - general procedure		Roller shutter opening / closing	
<p>In case of opening the roller shutter pull slowly the rope or strap at 1/3 height in your direction. Do not roll the roller shutter up with considerable force, in order not to hit the shutter box.</p> <p>In case of closing the roller shutter pull slowly the rope or strap at 1/3 height in your direction.</p> <p>Do not loose the rope or strap until the roller shutter is closed completely.</p> <p><b>⚠ WARNING!</b> When operating the roller shutter equipped with a coiler, avoid <b>sudden movements</b> of strap / rope, as this will cause the roller shutter's <b>damage</b></p>		<p>Strap / rope should be pulled and rolled up at the same pace.</p> <p><b>⚠ WARNING!</b> When operating the roller shutter equipped with a coiler, do not move the hand <b>to the right or to the left</b>, because this can lead to uneven strap / rope winding resulting in improper operation of the roller shutter.</p> <p><b>NOTE:</b> Operation of a roller shutter with a strap / rope is carried out only in the vertical plane.</p>	

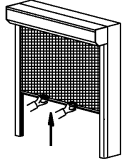
#### Handle

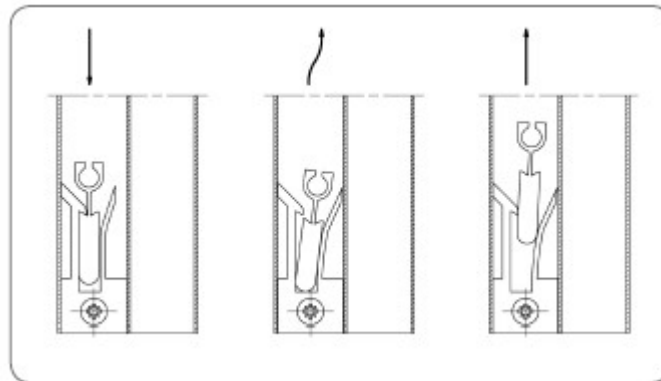
Roller shutter opening / closing	
<p>Just before complete opening of the roller shutter, start to turn the handle slowly, so as not to cause too rapid coiling of the roller shutter curtain and hitting the shutter box.</p> <p>Just before complete closure of the roller shutter, start to turn the handle slowly to clearly perceptible resistance.</p> <p>When resistance is perceptible, stop turning the handle.</p> <p><b>⚠ WARNING!</b> When rotating the crank, it is necessary to avoid large inclination angles as it can result in the <b>blockage</b> of the roller shutter.</p> <p><b>NOTE:</b> When the roller shutter is completely open do not turn the handle "by force". When the roller shutter is completely closed also do not turn the handle from the time when the increased resistance is felt, or the curtain hits the obstacle.</p>	

### Operation of roller shutters with electric drive

The use of a rotary switch or key switch		The use of the switch "step by step"	
<p>The roller shutter moves in the desired direction (up - down):</p> <ul style="list-style-type: none"> <li>- <b>press</b> the appropriate key of the switch key (up - down)</li> <li>- <b>turn</b> the rotary switch knob (right - left).</li> </ul> <p><b>⚠ WARNING!</b> In the curtain's operation zone must not appear any <b>persons or objects</b> which prevent its exploitation.</p>		<p>The roller shutter moves in the desired direction (up -stop-down) after pressing the button.</p> <p><b>⚠ WARNING!</b> In the curtain's operation zone must not appear any <b>persons or objects</b> which prevent its exploitation.</p>	

## Operation of the insect screen rolled in the roller shutter box

MKT system	
<p>When the net is unblocked it is necessary to hold it with both hands as long as possible in order to avoid <b>damage</b> which occurs due to sudden net's rolling</p>	

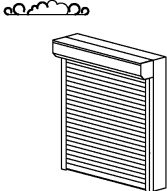
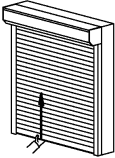
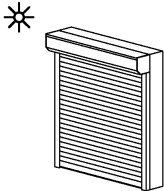
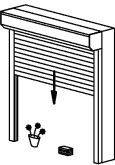
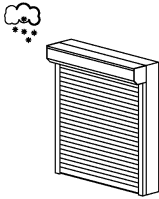
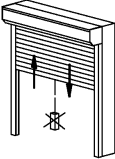

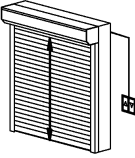
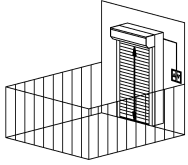


During the use of the roller shutter it is necessary to pay special attention to the following recommendations, which failure may result in roller shutter's damage:

- the use of this roller shutter is permitted only in the ambient temperatures between - 25°C and + 65°C
- roller shutters with an electro-mechanical drive can only be used to work in intermittent motion. Constant operation of the roller shutter cannot exceed 4 minutes
- the roller shutter can be used up to 50 cycles of opening and closing for the day,
- when closing the roller shutter it is necessary to make sure that there are no persons or objects present in curtain's operation zone,
- it is necessary to clean the curtain from every pollution which can damage the varnished coating of the curtain during rolling up,
- it is prohibited to open the roller shutter in case of curtain's strong icing
- it is prohibited to make repairs and modifications in the mechanisms and the structure of the roller shutter, in case of incorrect roller shutter's operation it is necessary to contact the manufacturer immediately. Activities such as replacement of the roller shutter's elements or any change in its structure can only be executed by an authorised fitter.
- in case of failure of the roller shutter's hanging system it is necessary to stop the curtain and keep it safe in this position until the maintenance service crew arrives.

## Guidelines for the safe use of roller shutters

Drawings included in the description are exemplary drawings as this manual is used for various roller shutter systems and types.

Operation of the roller shutter in windy conditions		Improper operation of the roller shutter	
<p>The window should be closed during strong wind. In case of absence it is necessary to ensure there is no possibility of drafts.</p> <p><b>⚠WARNING!</b> Dropped roller curtain might <b>not be able to withstand</b> the wind load when the window is open at the same time.</p> <p><b>NOTE:</b> The specified <b>wind load resistance</b> is guaranteed only in case of the closed window.</p>		<p>It is forbidden to move up the shutter curtain using hands or tools.</p> <p><b>⚠WARNING!</b> Attempts to move up the curtain lead to incorrect functioning of the roller shutter or its <b>damage</b>.</p>	
Operating the roller shutter in hot weather		Roller shutter working area	
<p>When the roller shutter is used as a sun protection it is not recommended to close it completely, thus allowing air to <b>circulate</b> between the window and the roller shutter.</p>		<p>Roller shutter working zone can not be in any way obscured or locked.</p> <p><b>⚠WARNING!</b> <b>Any objects or people</b> preventing exploitation must not be located in the roller shutter working zone</p>	
Operating the roller shutter in cold weather		Misuse of the roller shutter	
<p>It is possible that roller shutter become iced in cold weather and during snowfall. In this case do not attempt to open and close the roller shutter.</p> <p><b>⚠WARNING!</b> The roller shutter can be operated only after the <b>removal of icing</b>.</p>		<p>Do not load the roller shutter with additional weights.</p> <p><b>⚠WARNING!</b> Any attempts of additionally roller shutter's load lead directly to its <b>damage</b>.</p>	
Roller shutter operation in winter		Operating system access	
<p>Switch automatic control devices off, if there is a risk of icing.</p> <p><b>NOTE:</b> If the drive is equipped with <b>overload protection</b> or obstacle detection system, switching off the automatic control devices is unnecessary.</p>		<p>It is forbidden to let children play with remote control or switch that control the roller shutter. The <b>remote control</b> must be protected against access by children. Only <b>adults</b> are allowed to operate the roller shutter.</p>	
Roller shutters with electric drive used on balcony doors or terrace doors			
<p>If the roller shutters assembled over balcony / terrace doors are the only "openings" through which you can come and go there is a potential risk that person on the balcony / terrace will get "closed out".</p> <p><b>NOTE:</b> In order to avoid the above situation it is recommended to switch off the roller shutter automatic control devices while staying on the balcony/terrace.</p>			

### 3. Maintenance and repair

Simple maintenance can be performed by the roller shutter users without any specific competences. These activities consist of maintaining the purity of roller shutter curtain and removing pollutions which gather in the guide channels.

Observe the following rules:

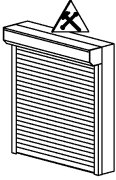
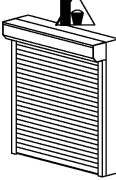
- maintenance activities must be executed when the roller shutter is stopped
- do not use harsh or abrasive cleaning tools,
- wash the roller shutter surface with water with the use of a small amount of mild cleaning agents with a neutral reaction (the activities must be executed in temperatures between 10<sup>0</sup> to 25<sup>0</sup>). The roller shutter must be protected from aggressive or corrosive substances, e.g. mortar compounds of saltpetre, acid, lye or salt as well as from mechanical damage. Strong cleaning agents can cause corrosion or change in the colour of varnish.
- do not use any organic solvents which include esters, ketones, alcohols, aromas or chlorinated hydrocarbon materials and other cleaning agents with an unknown chemical composition.
- when removing grease stains (e.g. oils, slag) or remains of glues, adhesive silicone rubbers use agents without aromatised petroleum hydrocarbons.

**It is recommended to execute periodical inspections comprising in controlling the completeness, condition and effectiveness of functioning of structural elements and electrical devices, control and security devices before the first activation and every 6 months after the first activation of the roller shutter.**

It is prohibited to make any changes in the delivered product as it may result in the loss of warranty and is hazardous for the correct operation.

Maintenance and repair works should be executed by the manufacturer's qualified maintenance service or his authorised representative.

#### Maintenance and cleaning of the roller shutter

Maintenance		Cleaning	
<p>Regularly inspect all visible parts of the roller shutter for blockage or other type of damage. In case of detection of any damage or incorrectness in the operation, <b>do not repair</b> the roller shutter, but contact the <b>service technician</b>.</p> <p><b>⚠ WARNING!</b> Keeping the roller shutter supplied with power during maintenance activities executed in the vicinity of electrical connections may result in electrocution.</p> <p><b>NOTE:</b> Works related to electrical parts can only be executed by persons with appropriate authorisation.</p>		<p>It is recommended to execute regular cleaning of the roller shutter's surfaces in order to ensure long-lasting durability.</p> <p>Use appropriate cleaning agents for cleaning.</p> <p><b>⚠ WARNING!</b> Keeping the roller shutter supplied with power during cleaning executed in the vicinity of electrical connections may result in electrocution.</p> <p><b>NOTE:</b> Any foreign objects and dirt must be removed regularly from the guide channels.</p>	



## NOTES:

- We are not responsible for damage caused during improper use, as well as a result of wrong maintenance.
- All damage caused by a force majeure event, unusual atmospheric conditions or natural wear and tear will not be subject to claims. Natural wear and tear also includes wear and tear of the curtain's varnish coating which may include scratches after approx. 200 cycles.
- The condition for consideration of a claim is its reporting in a written form as well as provision of the purchase evidence.
- We take no responsibility for changes or improvements made in the construction of the roller shutter and the installation of additional components that have not been provided by the manufacturer.
- In case of necessity, the claimant is obligated to send the parts subject to replacement to the manufacturer.
- The manufacturer will not bear the costs related to the consideration of the claim.
- In case the claims are unjustified or in discordance with the warranty's conditions, the claimant will be encumbered with all the costs incurred by the manufacturer in relation to the considered claim.

## 4. Threats

The roller shutter manufactured by Fasada is a product which in normal or other reasonably predictable conditions of use does not pose any hazard or poses minor hazard which is acceptable during normal use with consideration of high level requirements regarding the protection of safety, life and health.



**It is forbidden to:**

- **use a damaged roller shutter,**
- **stay in an open roller shutter's zone by persons, vehicles or other objects,**
- **move under the roller shutter during its operation,**
- **activate the roller shutter and store a remote control device in a location which is easily accessible by persons who require adult's supervision,**
- **execute an electrical works, modernise or disassemble by unqualified personnel.**