

# Air Curtain LiO light 100/150/200/250 S IR

# USER'S MANUAL



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### 2.0 Foreword

#### Thank you for choosing Stavoklima!

At Stavoklima we believe in *quality, performance* and *cost-effectiveness*. All our products are hand-build in the Czech Republic, in the heart of Europe, from the best components available. We produce all the metal parts ourselves from carefully selected metal sheets using high-end metal processing machines. We apply very strict quality control from the very beginning of the production process to the moment of delivery to your door. Customer's satisfaction is our highest priority.

The core component of every air curtain are the fans. Inside every Stavoklima unit you will find long-lasting maintenance-free fans from the World fan industry leader — German company Ziehl-Abegg. All fans are ErP2015 compliant — provide high energy efficiency with respect and protection to the environment.

The custom-made control unit reflects over 25 years of experience and presents wide variety of control options with high level of reliability ensuring a quality product with a long lifespan. All internal electronics comply with SASO directives and the latest standards.

Stavoklima air curtains are made to last & keep occupants comfortable while minimizing negative environmental impacts. We bring you the European standard of indoor climate protection.

"Open your doors for the public without compromising the comfort."

#### Compliance chart:

<b>ErP</b> 2015	ErP 2015 Fan efficiency European norm
CE	CE mark Compliant with European Standards
(SASO) 1	SASO Certificate Certified for Saudi Arabian
STAVOKLIMA® QUALITY CONTROL	STAVOKLIMA® Quality Control Stavoklima-specific high-degree quality assurance program



### 3.0 Introduction

The LiO light air curtain is an ideal solution for shops, boutiques, restaurants, households, banks and hotels where cost-effective protection of inner climate is required. The LiO light air curtain is designed for wall mounting over the door with alternative ceiling mounting options (accessory for ceiling mounting not part of the standard delivery) and offering wide variety of control options.

An air curtain is a device which generates an engineered stream of guided air through a doorway or an opening acting as a separator of two adjacent areas against energy loss, humidity, and mass exchanges.

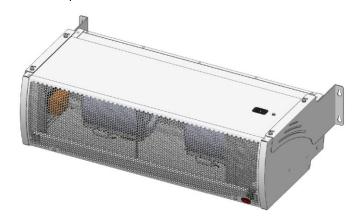
Taking into account the door dimensions and climate consideration, only a well-made air curtain with appropriately designed system will create the tight barrier across the entire height and width of the opening helping to contain conditioned air when the door or entrance is opened.

Every unit is equipped with automated directable outlet louvre with three presets of air flow vector for <u>normal operation</u>, <u>windy mode</u> and <u>cold saving mode</u>. The air curtain can be operated manually using the remote controller or automatically via magnetic door contact. The supplied remote controller is IR-based technology and works only if the transmission directed to the air curtain. In conjunction with supplied door contact it constitutes an autonomous system that is switched ON only when needed. The integrated delayer complements the longevity of the unit and provides stable operation in situations where doors are opened and closed with high frequency.

The LiO light air curtain is designed to operate indoor in temperatures between  $0^{\circ}$ C and  $+54^{\circ}$ C. The housing is made from powder coated galvanized steel sheet, contains inside (1) the electric box, (2) accelerating fans, (3) a plenum, and (4) the outlet louvre. Available lengths 1, 1.5, 2 & 2.5 meters.

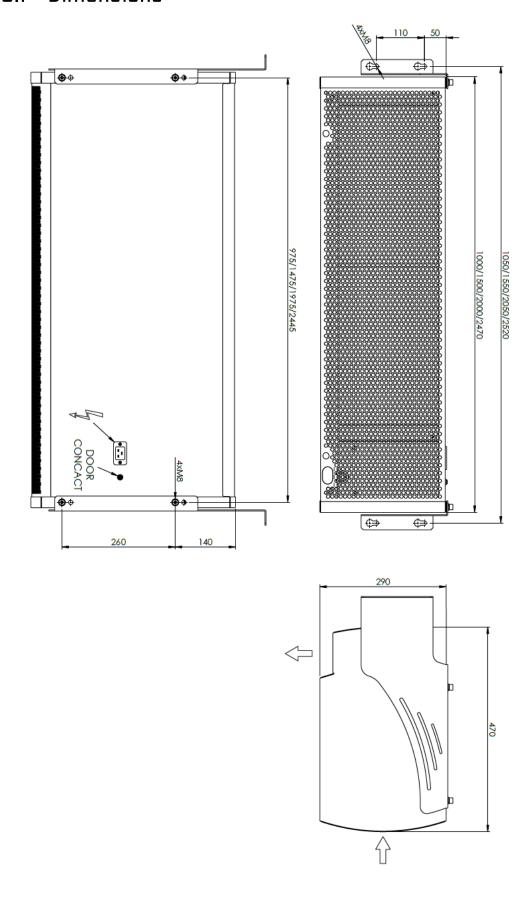
The unit is fully capable of running 24/7. The default paint is RAL 9006 (silver metallic). Custom build is available with different RAL colors targeting all decoration criteria.

"Going above and beyond customer expectations."





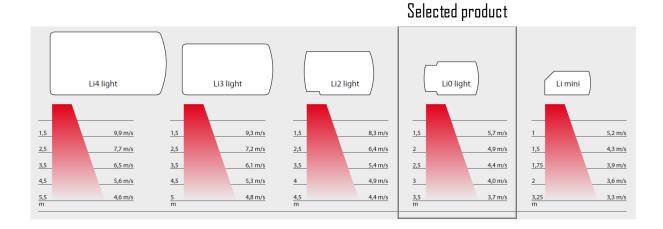
### 3.1 Dimensions





#### 3.2 Product info

Li0 light is the core product of the Li product line. It is designed for standard door size not higher than 2,7 meters. It houses radial fans with outstanding performance with additional noise-cancelling materials applied to the critical parts of the unit. The air volume is being equally distributed across the entire width of the outlet thanks to specifically angled air chamber (plenum).



#### 3.3 Technical parameters

Technical specifications		Li0 light IR 100	Li0 light IR 150	Li0 light IR 200
		1989	3073	4176
Air volume	m3/h	1500	2174	3001
(fan speed 4, 3, 2, 1)	m³/h	1249	2009	2499
		822	1449	1777
Length	mm	100	150	200
Power	V	230	230	230
Number of fans	pcs	2	3	4
Nominal power	kW	0,7	1	1,4
Nominal current	А	3	4,5	6
IP protection level	IP	22	22	22
Controller	type	IR	IR	IR
Outlet width	mm	60	60	60
Noise level at 3 m	dB	60	61	62,5
Weight	kg	37,8	49,4	64,3

fan speed voltage: stage 4 - 230V, stage 3 - 180V, stage 2 - 160V, stage 1 - 120V

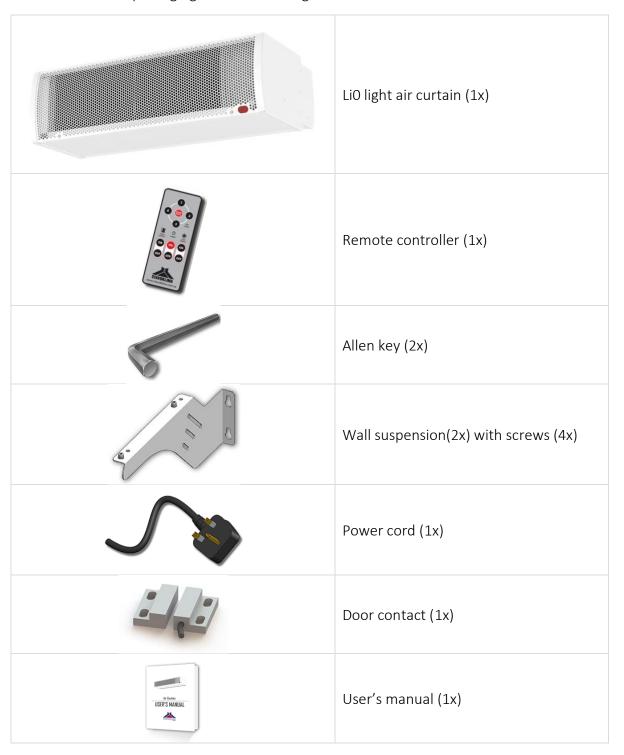
fans: safety margin 15% for 60 Hz voltage frequency



## 4.0 Package contents

Every unit is packed in a paper box made of recycled cardboard protected by cardboard fins. The air curtain housing is wrapped around in a LDPE bag for additional moisture protection.

The contents of the packaging are the following:



### 5.0 Unboxing

Before unboxing, please check the integrity of the packaging itself. If you spot any visible damage (dents, creases, deformations, bent corners, etc.) do not continue the unboxing process and report these to the supplier. Unboxing a damaged packaging without reporting back to the supplier passes the responsibility for the condition of the contents of the packaging onto the end user.

During unboxing, check carefully the contents of the packaging and inspect all the parts identified in the previous chapter. If you received extra accessories (aside of the packaging), use common sense and/or supplier's instructions to unbox & inspect these.

Make a record of any damaged parts and report back to the supplier.

Transport and handling must be performed with a relevant equipment with adequate capacity. The packaging should be handled with care and by personnel with relevant qualification only.



**WARNING:** Follow the instructions on labels placed on the unit. Packaged units must not be tilted or placed in positions other than as delivered or recommended by the manufacturer. The packaging also bears the serial number and type of the unit for easy identification of the unit type.



**RECYCLING:** Please recycle the packaging in compliance with your local environmental standards.



**STORAGE:** Storage conditions for unopened packaging is temperature range from -10 °C to+50 °C, humidity50-85% non-condensing.



### 6.0 Safety precautions

Observe the generally applicable country-specific regulations, in particular CSN 12 2002 and other related regulations. The unit must be disconnected from the mains when performing any service. Connections and grounding of the unit or its parts must comply especially with CSN 332190, 332000-5-51, 33 2000-5-54. Any electrical servicing must be performed by personnel with professional qualification in accordance with Section 6 of CBU Regulation no. 50/78 Coll.

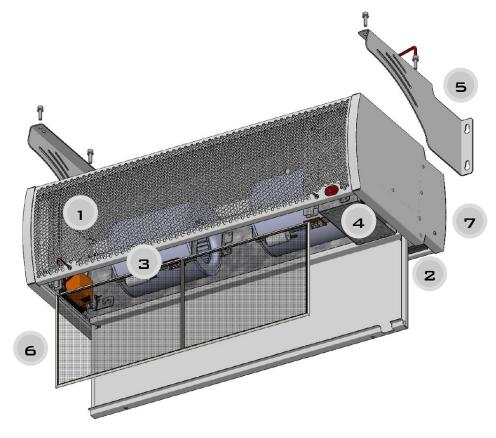
#### 6.1 Fire Safety

Observe the country-specific standards and applicable regulations. In particular CSN 061008 – Fire safety of appliances and heat sources, CSN 730823 Fire-technical properties of materials – degrees of combustibility. Install the unit 150 mm from combustible materials of classes B, C1, C2, 400 mm from easily combustible materials (class C3), and 1000 mm in the direction of radiation (air outlet of the unit).



# 7.0 Unit description

The description of the individual parts of the unit is for informative purposes only. Disassembly of the unit should be performed by authorized personnel only!



1	Inlet grill and IR receiver plastic cover
2	Positionable outlet louvre with a pull bar linked to actuator
3	Radial fans with condenser and connection rack
4	Control unit cabinet with IR receiver
5	Wall-mounting bracket
6	Filter bracket with removable filter



Air curtain chassis with angled air chamber (plenum) and service door

### 8.0 Installation

The air curtain is suspended at four suspension points located on both sides of the unit – two on top right and two on the top left side. Connection is performed using 4 screws with standard M8 threads. These screws are included. During the installation, always make sure all screws and fasteners are used and properly tightened.

Use adequate wall plugs and anchors only. Consider carefully the installation situation and the suitability of used fasteners and anchors as well as the strength of the structure. Make sure the wall is capable of supporting the weight of the unit. The manufacturer is not liable for improperly used wall plugs or other inappropriate fastening or suspending material. Do not install in humid, biological treatment or explosive areas where an aggressive atmosphere may be present. Do not touch the fan blades!

Follow all local safety regulations and use common sense to avoid injury of self or others.

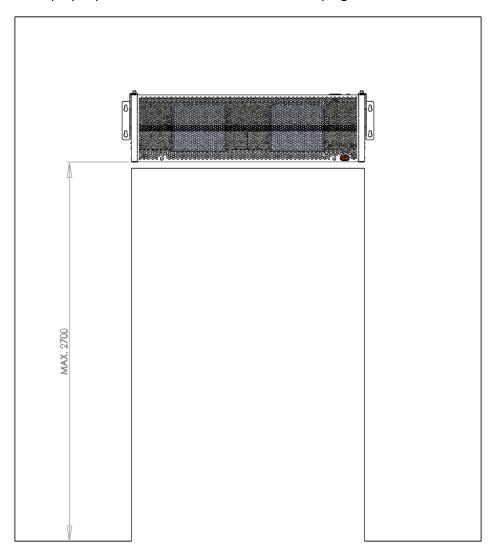
Before installation, perform the following:

- 1) Consider carefully the strength and load capacity of the supported structure. Make sure the wall/ceiling is capable of supporting the weight of the unit. Do not attach to drywall, plaster board, suspended ceilings, etc.
- 2) The air curtain is intended to be installed and mounted <u>horizontally</u>. Do not mount in other positions!
- 3) Determine the exact mounting location. The unit must be installed in the center of selected clearance, keeping the opening sealed along the entire length of the air curtain. Do not exceed the recommended installation height and width!
- 4) Use adequate wall plugs and anchors only, with suitable tools for installation and lifting.
- 5) During lifting and installation, do not stand underneath the unit.
- 6) The air curtain is suspended at four suspension points located on the top of the unit. All suspension points must be used and secured.
- 7) Make sure all screws and fasteners are used and properly tightened.
- 8) The unit has to be kept clean and dry while being installed.
- 9) The air curtain must be close as possible to the upper edge of the opening.
- 10) The air stream barrier must not be obstructed with upper door frame or sliding doors for all automated air flow vector (normal operation, windy mode and cold saving mode).

Please apply these installation instructions for later re-installation, to be available throughout the life of the unit.



For proper performance, do not install the unit any higher than 2,7 meters.



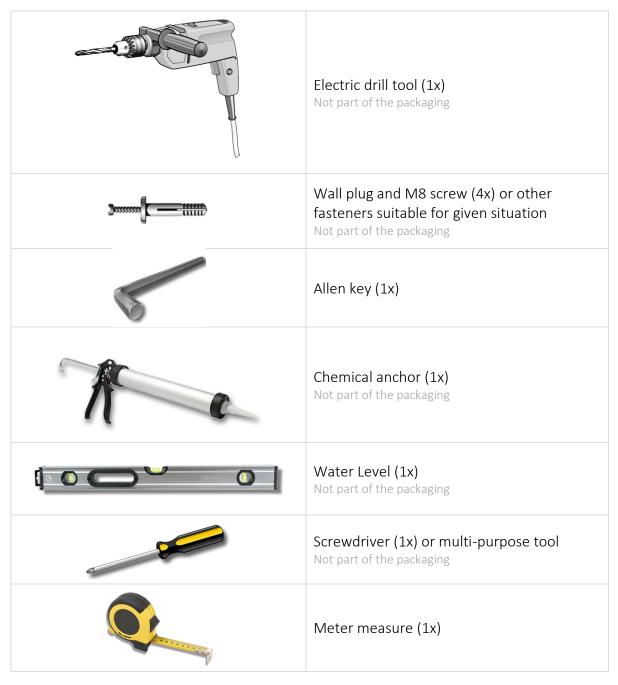


**WARNING:** Installation is performed at one's own risk. Any damage resulting from inappropriate handling is not covered by the warranty.

#### 8.1 Required tools

In order to successfully install the air curtain, additional tools are needed. Make sure the selection of the tools corresponds to the material of the wall. If not, alter the required tools list accordingly.

List of recommended tools:





**WARNING:** Any damage resulting from the use of unsuitable tools or inadequate fasteners is not covered by the warranty.

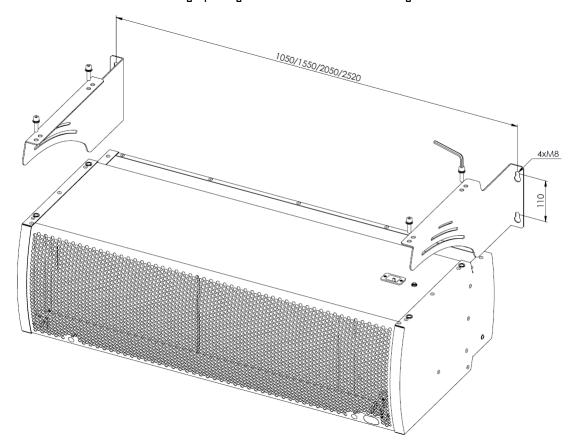


#### 8.2 Wall mounting

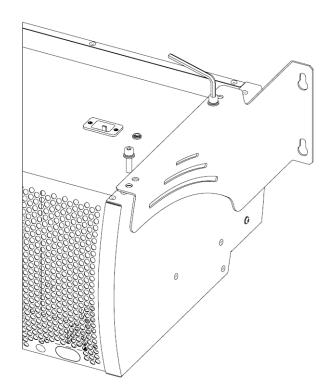
Please follow these steps in order to mount the air curtain on the wall:

- 1) Using the meter measure and water level, mark the drilling points for the wall brackets on the wall. Follow the drilling spacing at the bottom of this page.
- 2) Drill the holes for wall plugs and anchors. Always use adequate drill bit for selected wall plugs.
- 3) Apply chemical anchor inside the drill holes.
- 4) Insert the wall plugs into the wall.
- 5) Screw in the M8 screws or equivalent fasteners. Do not fully tighten (allow approx. 1 cm distance between the screw head and the wall).
- 6) Put the wall brackets in place. Use wider openings at the bottom of mounting holes to pass through the screw heads and gently press the wall brackets down. The brackets will lock in the place. The horizontal mounting flaps should face inwards (see picture below).
- 7) Tighten the screws. If done properly, the wall bracket should be tightly attached to the wall.
- 8) Allow the chemical anchor to harden (if used).
- 9) Lift the air curtain using appropriate handling tools.
- 10) Use supplied screws to attach the air curtain to the wall bracket and tighten all the screws using the supplied Allen key.

#### Drilling spacing and recommended mounting







The supplied wall brackets offer two mounting options depending on the desired distance from the wall. Select the closest set of mounting holes to minimize the offset of the unit.

The unit should be supported for the entire time until all four screws are properly fastened.

When mounted, make sure the unit is stable and fit for operation. Check the wall around the mounting points regularly.



**WARNING:** Use suitable lifting equipment and keep the unit secured for the entire time of the installation. Any damage resulting from the use of inadequate lifting equipment or handling is not covered by the warranty.



**ALTERNATIVE MOUNTING:** If conditions does not allow wall mounting, please contact the supplier for alternative mounting options.

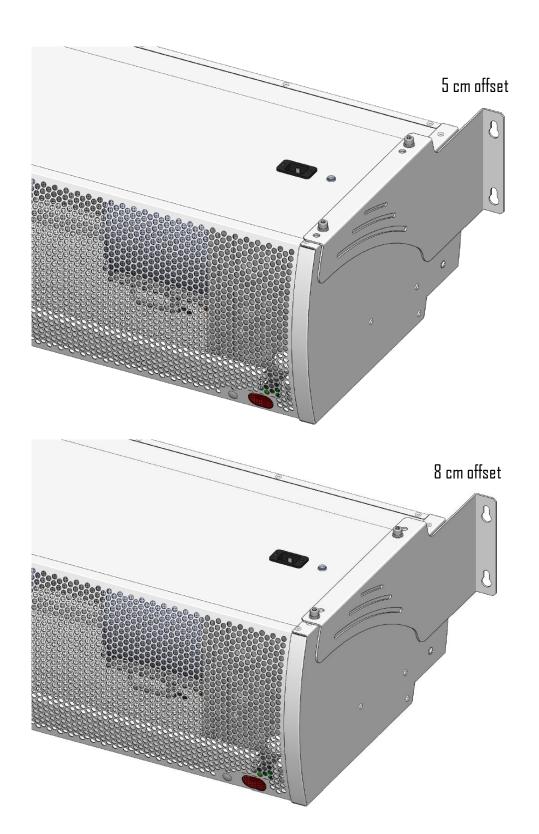


**OPTIMAL MOUNTING:** For the best sealing effectiveness, an air curtain must be installed at its optimum. In order to achieve the best performance, make sure the unit is centered above the door, it covers the entire width of the door and it is mounted in proximity of the top of the door. The offset of the door should be minimal.

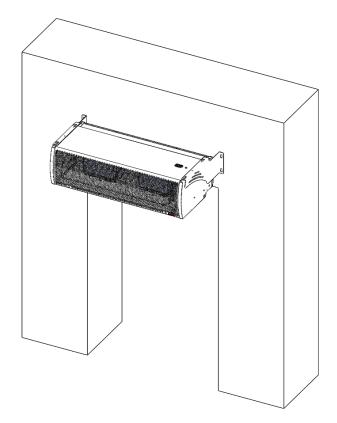


### 8.3 Mounting options

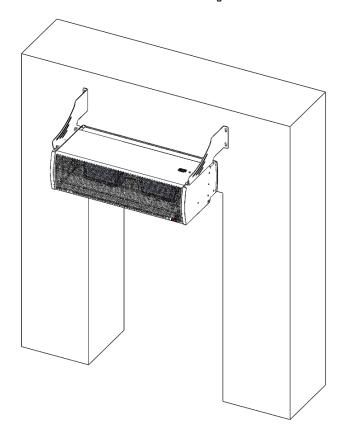
The wall brackets have two sets of mounting holes. One set allow mounting in 5 cm distance from the wall. The other set moves the unit 8 cm from the wall:



There are two alternative mounting options for the supplied wall brackets:



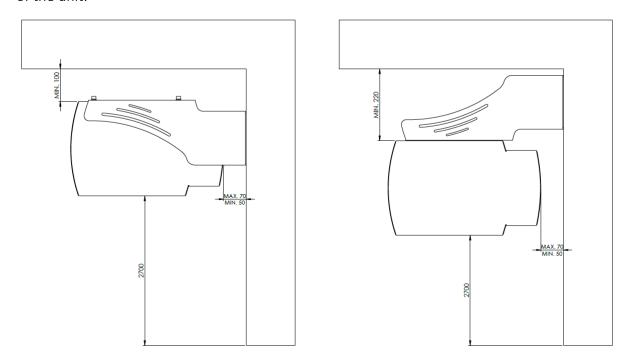
Standard mounting



Reverse mounting



Respect the minimal distances from the ceiling and the wall in order to use the full potential of the unit:



Air inlet must be at least 200 mm far from the wall to ensure unobstructed air movement.

#### 8.4 Suspended mounting

To hang the unit from a ceiling:

- 1) Four threaded inserts are located on the top of the unit for top suspension mounting.
- 2) Determining the height of four Suspension Rods required and where they are to be located. The suspension rods are not provided with the unit.
- 3) Take the time to meet the load, weight, studding connectors, and chemical anchors requirements.
- 4) Additional hanging elements, extension kits, and washers might be needed with regard to ceiling height, air curtain's weight, fasteners, strength and load capacity. Hanging elements and extension kits are not provided.
- 5) Allow the chemical anchor to harden (if used).
- 6) Lift the air curtain using appropriate handling tools.
- 7) Mount and level the air curtain by screwing four suspension rods into the threaded inserts located at the top corners of the unit.
- 8) The unit should be supported and secured for the entire time of installation.



#### 8.5 Connecting the unit

The air curtain requires connection to electrical network of 220 V (AC) at 60 Hz using TYPE G electrical connector (UK plug) with circuit breaker rated to 13 A. Therefore a BS 1363 electrical socket is required (British Standard 13 A socket-outlet) for powering the air curtain:





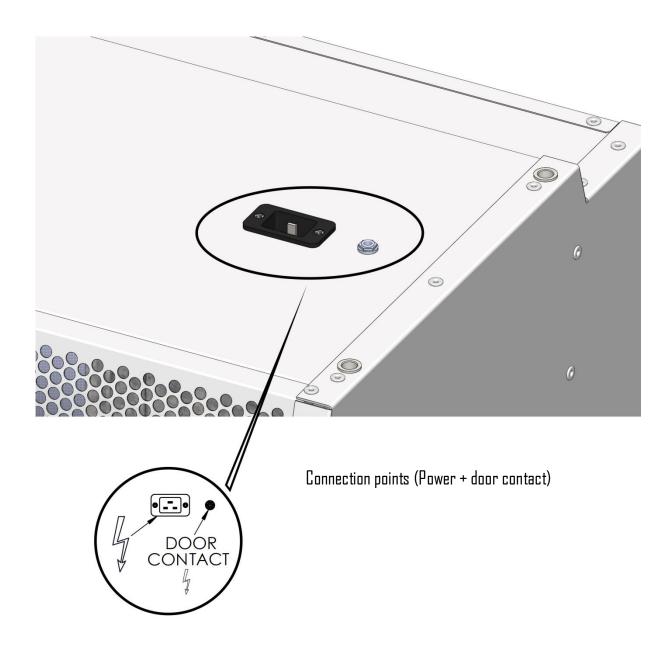
BS 1363 (TYPE G) socket

BS 1363 (TYPE G) plug

Connecting points are located on the top of the unit. Please use only supplied power cable and door contact.

Air curtain shall be installed in accordance with national wiring regulations. Overload or shortage of power circuit could cause an electric shock or a fire. When drilling into the wall or ceiling, do not cut or damage hidden wires and other utilities. Connection to a higher voltage will result in fire, electric shocks, and damages.

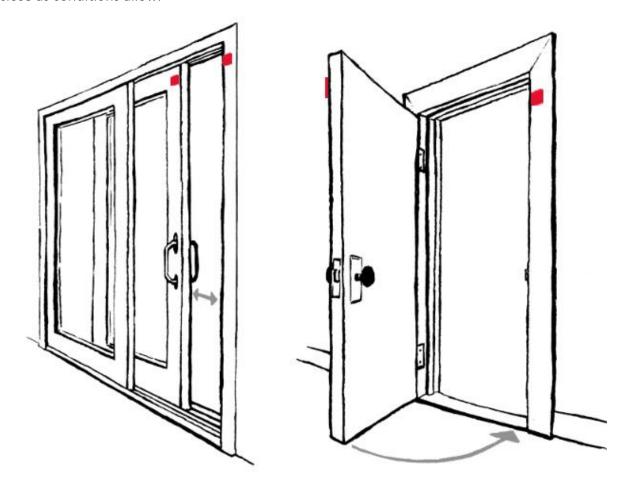
Power failure during operation will stop the unit completely, the unit will resume operation according to the last sets prior to power failure.



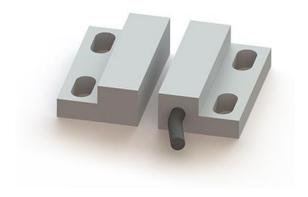


**WARNING:** Connecting is performed at one's own risk. Prior to connecting the air curtain to the electrical network, check the integrity of all supplied cables. If you detect any damage, do not connect the unit and contact the supplier. Any damage resulting from inadequate handling is not covered by the warranty.

The supplied door contact can be used with both – sliding door and standard door. The sensor (part with cable attached) is meant to be mounted on the door frame. The magnet (part without cable) should be placed on the moving part of the door in a spot where it meets its counterpart mounted on the door frame. The distance of magnet and the sensor should be as close as conditions allow.



Installation spots on sliding and standard door



Magnetic Door contact



**OPTIMAL MOUNTING:** Use self-tapping screws for mounting the door contact into position. If the situation doesn't allow solid fastening method, use heavy duty glue to secure the door contact in place. Prior to permanent mounting, tape the door contact to the door and test the functionality.

#### 8.6 Commission

Prior to the first startup of the unit, check the following:

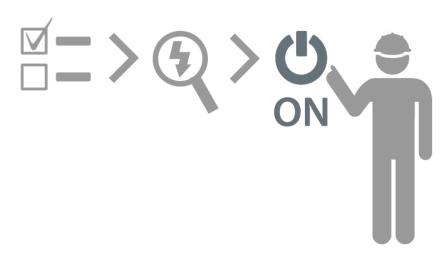
- integrity of the unit's covers and chassis
- stability of mechanical mounting and anchoring of the unit
- proper connection of the power cable and the door contact
- sufficient circuit breaker in the electrical cabinet supervising the electrical socket the unit uses
- absence of mechanical objects or debris in and around the unit

After positive checkup of the unit the air curtain can be turned ON by pressing **RED** power ON button on the remote controller. From this point the fans of the unit should be working and air should be coming out of the unit's outlet.



**STARTUP ISSUES:** If you encounter difficulties commissioning the unit, refer to the Troubleshooting chapter (11.0) prior to contacting the supplier.

Follow the steps!





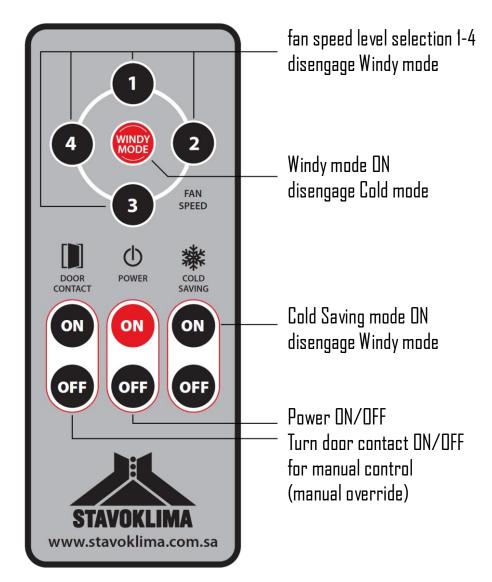
### 9.0 Remote controller

The air curtain is controlled using a remote IR (infrared) controller that is supplied with the unit. For reliable control, visual contact between the unit and the remote controller is required. Pointing the remote controller at the air curtain is an important factor of a successful control. The air curtain reacts to successful reception of a command with a blink of a red LED indicator.

The controller is universal and can be used to control any Stavoklima air curtain equipped with IR receiver.

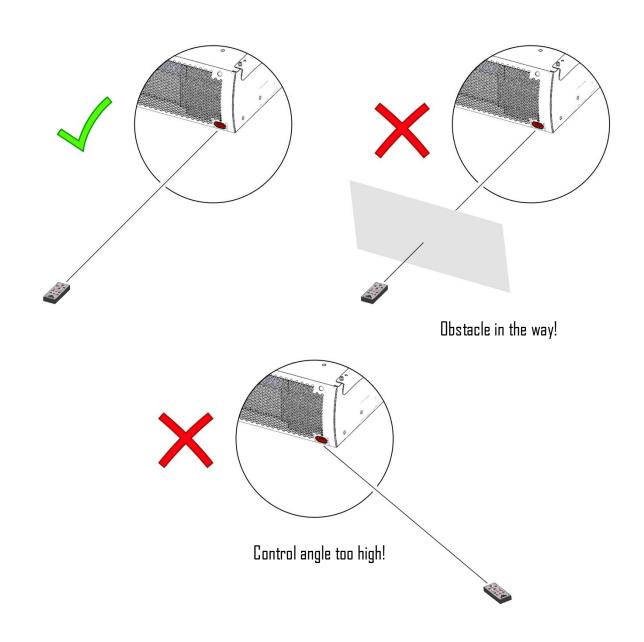
#### 9.1 Buttons

The command is repeated as long as a button is pressed. The buttons have the following functions:



### 9.2 Control Range

For optimal use, make sure the remote controller has direct line of sight with the receiver of the air curtain (the red rounded-shaped plastic window) and no obstacles are located in the way. The angle of control should have minimal deviation.





**WARNING:** The range of the remote controller can be decreased by many factors (low battery, room layout, insufficient visual contact, not pointing the remote controller directly at the IR receiver, etc.). Suboptimal control range do not establish a legitimate argument to raise a claim.



#### 9.3 Fan Speed Regulation

Four different fan speed levels can be selected using the IR remote controller allowing the end user to change the air volume of the air curtain depending on site conditions. Higher fan speed levels entail decreased sound comfort and vice versa. Changing fan speed levels with door contact enabled does not require the door to be opened.

	Fist fan speed level
	The fans are set on low speed
2	Fist fan speed level
	The fans are set on medium speed
3	Fist fan speed level
	The fans are set on high speed
4	Fist fan speed level
	The fans are set on maximal speed
WINDY	Windy mode activated
WINDY	Fan speed level 4 is selected and the outlet moves to +15° position

#### 9.4 Door Contact

The remote controller is equipped with door contact switch that enables switching between autonomous control (door-controlled) and manual control. To preserve the longevity of the fans, the door contact has integrated timer that keeps the air curtain running for 30 seconds after the door close. If the door is opened during this period, the 30-second interval resets and starts over.

ON	Autonomous mode activated  The air curtain is controlled by the door contact
OFF	Manual mode activated  The air curtain is controlled manually, door contact ignored

#### 9.5 Windy mode

Activation of Windy mode automatically switches the fans to the highest speed and angles the outlet louvre out of the door thus creating much more resilient air barrier against wind storms. Selecting any speed level or Cold mode while in cancels the Windy mode.

WINDY	Windy mode activated The outlet moves to +15° position and fan speed level 4 is selected
1234	Windy mode deactivated  The outlet moves to default position and fan speed level is changed
COLD	Windy mode deactivated and Cold mode activated The outlet moves to -15° position and last fan setting is restored



#### 9.6 Cold Saving mode

In order to increase the preservation of indoor climate in heavily air-conditioned environments, the Cold Saving mode angles the outlet louvre inside the room thus keeping the cold air accumulated on the floor from escaping through the door area. Changing fan speed levels while in Cold Saving mode does not interrupt the Cold Saving mode (unlike in case of Windy Mode). Cold Saving mode should be used only provided that the outside wind is not breeding.

ON	Cold Saving mode activated The outlet moves to -15° position
OFF	Cold Saving mode deactivated The outlet moves to default position
WINDY	Cold Saving mode deactivated and Windy mode activated The outlet moves to +15° position and fan speed level 4 is selected

#### 9.7 Power

The air curtain can be powered ON and OFF using the ON/OFF switch on the remote controller. The air curtain stores the last used setting in the internal memory when powered down (including power shortage). When the unit is powered back ON (or the power is restored), it resumes last used setting.

ON	Power ON The air curtain is turned ON, last used setting is restored
OFF	Power OFF The air curtain is turned OFF, the last used setting is stored

#### 9.8 Batteries

Stavoklima remote controller is powered by standard 1,5V AAA batteries. <u>Batteries are not part of the packaging</u>. The use of rechargeable AAA batteries is not recommended for their lower voltage of 1.2 V. The controller doesn't indicate low batteries. Exchange batteries when control of the unit becomes suboptimal from within the active zone.



**RECYCLING:** Please recycle used batteries in compliance with your local environmental standards.



### 10.0 Maintenance

All the units are always factory-checked and tested carefully prior to dispatch. The most frequent errors stem from misunderstanding the function of the unit or from incorrect connection. Therefore, observe carefully the manufacturer's instructions to avoid complicated troubleshooting. Under no circumstances operate the unit in contradiction with the User's manual.

The unit is designed for electrical networks of 220V/60 Hz. Running the unit under different conditions may result into irreversible damage to the unit. Such damage is not covered by the warranty.



**WARNING:** Disconnect the unit from electrical supply prior to any work on the device. Risk of electric shock.

#### 10.1 Filter maintenance

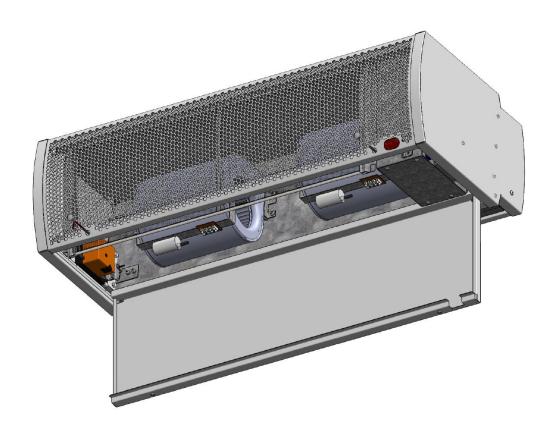
Every air curtain from Li product family is equipped with a filter. The filter is most maintenance-demanding part of the unit and it requires frequent cleaning/changing. The purpose of the filter is to protect the fans from deteriorating and damage by filtering airborne particles and objects. Proper maintenance can extend the life of the product though it involves the owner's expense. If filter is cleaned, the air curtain will run more efficiently. The acceptable cleaning frequency is once a month, or as needed.

In order to clean/change the filter, the front panel needs to be removed. Loosen all screws indicated on the following diagram with allen key.

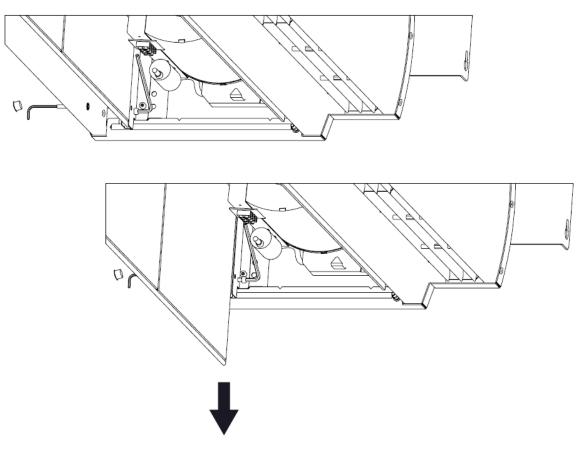


**WARNING:** Clogged air filters kills your efficiency of the air curtain. Make sure an authorized service person performs the scheduled filter cleaning/changing, if the air curtain is mounted in high places. Use only original filters. Any damage resulting from use of non-original filter or no filter at all, is not covered by the warranty.





The filter is fixed inside the filter bracket. It is held in place by four screws that need to be loosened prior to removing the filter. After cleaning/changing the filter, return it into its original position and tighten the screws.



#### 10.2 Maintenance schedule

The Li2 Light air curtains are made of high-quality components that do not require any special maintenance. To ensure long life of the unit, we recommend maintaining it in the specified intervals. A scheduled maintenance should be adapted and pre-planned, organized shut-down and cleaning of equipment to ensure that the unit operates in a manner safe to the occupants and the facility itself. The environments with high density of airborne particles will cause the filter to clog up more and the air curtain would require more frequent cleaning/exchange of the filter. Do not use a chemically-treated duster, benzene, thinner, polishing powder, or similar solvents for cleaning the surface of the unit. It may damage or fade the surface of the unit.

Every six months	Wall mount check Check the wall bracket and the wall around the mounting points for signs of structural instability (cracks, unevenness, compromised integrity of the wall, loose wall plugs, etc.). Check tightening of all the fasteners and bolted connections. In addition, check tightening of the bolts of the outlet louvres — they are accessible on the inner sidewall of the curtain. Tightening of the central vanes is done by turning the louvres (by tightening the internal threaded pin).
Every six months	Internals check & cleaning Check the fan housing and the internal/external parts of the unit and clean them. Do not wash the fan body with water! Use a damp cloth to remove the dust from the surfaces — otherwise the fan windings may be damaged. Allow min. 60 minutes for the water to completely dry out before starting the unit. Work carefully when wiping the outlet louvres. Fragile — risk of damage!
Every twelve months	Safety check Check the safety of the unit in terms of electric-shock protection in accordance with applicable country-specific standards, incl. checks of the grounding system.
Every three months	Intake cleaning Complete cleaning of the intake grill and tighten it, if needed.
Every 12 months	Battery change Exchange the batteries in the remote controller for a pair of fresh ones.
Every 12 months	Filter change Replace the filter.



**WARNING:** Disregarding the maintenance schedule may result into poor performance or irreversible damage to the unit. Such damage is not covered by the warranty.



## 11.0 Troubleshooting

Please refer to the following list of situations before contacting the supplier:

The unit won't start upon pressing the Power ON button	1) Door contact check If door contact is enabled, open the door to activate the unit or turn the door contact OFF. The unit should respond immediately. 2) Power cable check Check whether the power cable is plugged in the power socket and make sure it is connected to the connector on the top of the unit. 3) Circuit breaker check Check the circuit breaker inside the electrical cabinet and make sure it matches the minimal requirements for operating the air curtain. 4) Battery check Replace the batteries in the remote controller and try again.
The unit won't stop upon closing the door (with door contact ON)	<ol> <li>Timer check         The air curtain is programmed to switch the fans OFF 30 seconds after closing of the door. Make sure the door stay closed for more than 30 seconds.     </li> <li>Door contact check         Check thoroughly the door contact, it's integrity and mounting position. The sensor is very likely too far from the magnet and the state of the door is constantly OPEN.         Mount the sensor and/or the magnet closer to each other.     </li> <li>Door check         Check the door are for objects blocking the door from fully closing and remove them.     </li> </ol>
The unit won't stop upon pressing the Power OFF button (with door contact OFF)	<ol> <li>Control position check         Make sure the remote controller has got visual contact with the receiver of the unit (red oval plastic cover in the bottom right corner of the front mask) and it is pointing directly at it.     </li> <li>Battery check         Replace the batteries in the remote controller and try again.     </li> </ol>
The unit doesn't respond to pressing buttons on the remote controller	<ol> <li>Control position check         Make sure the remote controller has got visual contact with the receiver of the unit         (red oval plastic cover in the bottom right corner of the front mask) and it is pointing         directly at it.     </li> <li>Battery check         Replace the batteries in the remote controller and try again.     </li> <li>Power cable check         Check whether the power cable is plugged in the power socket and make sure it is         connected to the connector on the top of the unit.     </li> <li>Circuit breaker check         Check the circuit breaker inside the electrical cabinet and make sure it matches the         minimal requirements for operating the air curtain.</li> </ol>

The strange noises are coming from inside of the unit	<ol> <li>Filter check         Access the filter of the unit and clean/replace it.         2) Internals check         Check the internals of the unit including the outlet. Remove any foreign objects.     </li> <li>Fans check         Check the fans for signs of wear and damage. If you detect any signs of a faulty fan, contact your supplier of air curtains.     </li> </ol>
The unit's performance is low	<ol> <li>Fan speed check</li> <li>Switch the unit into higher fan speed level.</li> <li>Filter check</li> <li>Access the filter of the unit and clean/replace it.</li> <li>Fans check</li> <li>Check the fans for signs of wear and damage. If you detect any signs of a faulty fan, contact your supplier of air curtains.</li> <li>Specifications check</li> <li>Check the User's manual for maximal recommended mounting height and make sure this height is not exceeded.</li> <li>Negative conditions check</li> <li>There are factors that can have negative impact the air barrier generated by the air curtain – for example chimney effect, pressure difference, draft, etc. These factors need to be minimized in order to provide best conditions for the air curtain to function properly.</li> </ol>
The power shortage occurred and the stopped working	1) Restore the power supply Once the power supply is restored, the unit will continue operation with last active setting loaded in the memory before the power down.

### 12.0 Important Warnings

Door air curtains are designed to prevent losses of heat or cold, to ensure filtration and heating, or to ensure ventilation with mixing facilities. Any other use is not the intended application. The manufacturer cannot be held liable for any damage resulting from misapplication. Observe this manual when operating these units.

Installation, wiring and repairs must be performed by qualified personnel in accordance with applicable country-specific regulations and standards.

Do not allow children to play with controllers, keep remote controls away from children.

This warranty does not apply:

- 1) To consumables, such as filters, unless failure has occurred due to a defect in materials.
- 2) Damage caused by accident, abuse, misuse, liquid contact, fire, electrical shocks, earthquake or other external cause.
- 3) Shortage in fulfilment of safety provisions and instructions.
- 4) Operating the unit outdoor.
- 5) Modified and altering functionality or capability without the written permission of manufacturer
- 6) Improper installation, commissioning, and using weak hanging materials.
- 7) Installing the unit vertically. Only horizontal installation is permitted.
- 8) Storing the units in humid areas like swimming pools.



**WARNING:** Do not try to insert paper or foreign objects through air inlet or discharge opening as this may block the air movement and damage the air curtain

### 13.0 Contact Info

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