Automatically Controlled Movement MCA

MCA has gathered over 15 years of experience,
120 persons involved in the production and distribution activities and the continuous desire of improvement.

The product offer is improved and extended with assembly services, technical support and specialized service.

The development strategy is directed towards establishing partnerships with the architecture bureaus, construction companies and entrepreneurs.

We provide products that comply with EU standards, guarantee a high quality - price ratio and we ensure short term delivery:

- Sectional and roller garage doors
- Industrial sectional doors
- Dock levellers and dock seals
- Fireproof doors and industrial roller shutters
- Automation systems for gates
- Window roller shutters
- Insect nets.

Industrial sectional doors MCA

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INDUSTRIAL SECTIONAL DOORS

Quality is Our Main Value

QUALITY - BEFORE EVERYTHING

The materials used to produce the MCA industrial sectional doors are of the best quality: sandwich panels made of galvanized steel sheets and painted in electrostatic field, sliding guides and accessories made of galvanized steel sheets, sliding rollers made of stainless steel, EPDM gaskets, extruded aluminum profiles. The thickness of the steel sheet is 0.7 mm for FLUSH panels and 0.5mm for RIB panels.

STEEL 0,7 mm thickness

THE QUALITY MANAGEMENT SYSTEM IS CERTIFIED SR EN ISO 9001:2008

Continuously improving the quality is one of the main objective of MCA. TUV Rheinland is a German leading company that certifies whether the Quality Management System of MCA Romania complies with SR EN ISO9001.

TÜVRheinland® România

DEVELOPMENT AND RESEARCH

The R&D department is continuously striving to improve the quality of the products and find new solutions in order to meet our customers' demands and increase the safety during every operation.

RELIABLE SAFETY SYSTEMS

Special safety systems are used for protection during usage, such as: springs safety system (prevents door falling in case of spring failure); anti-breakage cable system, light barrier with photocells, safety edge system, operator equiped with obstacle detection safety system (if the door meets an obstacle the operator stops and lifts the door).

SAFETY standard SYSTEMS

PRODUCTION TIME

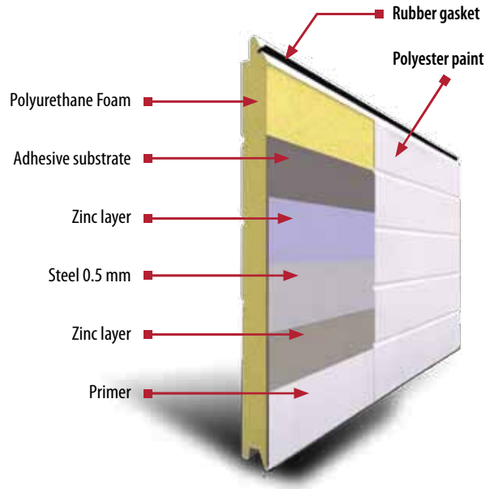
The production time for doors with standard panels is made within 7 days and can be delivered either from the factory storage house, or can be shipped all over the world.

PRODUCTION IN 7 days

EFFICIENT THERMAL INSULATION

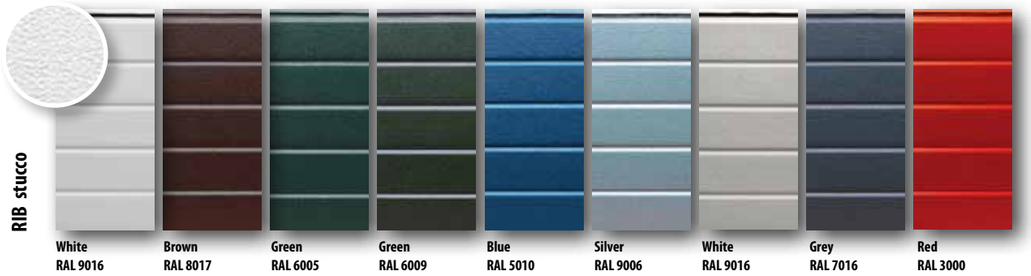
Sectional door panels

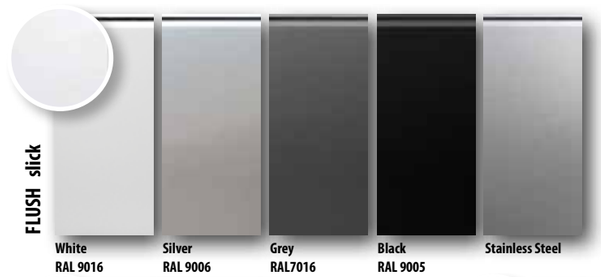
MCA SECTIONAL DOOR PANEL FEATURES

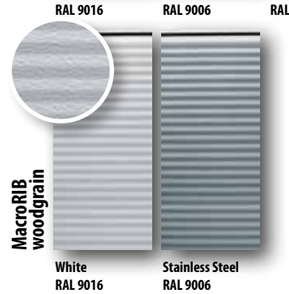


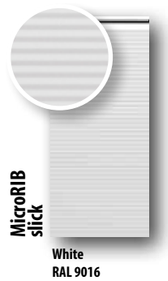
- **Thermal insulation**
  The panels are filled with polyurethane foam with excellent insulating properties. At the same thickness the foam gives a double degree of insulation compared with polystyrene.
- **Mechanical strength**
  Galvanized steel sheet panels filled with 40 mm polyurethane foam. In case of the embossed (woodgrain, stucco) panels the steel sheet has a thickness of 0.5 mm and in case of the slick panels the sheet thickness is 0.7 mm.
- **Anti-finger grip**
  The shape of the panels has been designed to avoid trapping fingers when it is manually operated.
- **Uniform color and resistant.**
  Through the painting process, the color layer is applied evenly through the whole panel surface and has a long lasting resistance
- **Corrosion Resistance**
  The steel from which the panels are made of is protected against oxidation with layers of zinc (galvanized steel).

SECTIONAL DOOR PANELS - TYPES AND COLORS









BUILT FOR A LIFETIME

Galvanized steel sheet panels filled with 40 mm polyurethane foam. In case of the embossed (woodgrain, stucco) panels the steel sheet has a thickness of 0.5 mm and in case of the slick panels the sheet thickness is 0.7 mm.

ANY COLOR IS POSSIBLE

The slick panels can be painted in any RAL color so that the sectional doors will be in tune with the facade of the building.

SAFETY SYSTEMS

CABLE FAILURE SAFETY SYSTEM

MCA industrial sectional doors meet the highest safety standards. Cable failure safety system is standard installed on all sectional doors manufactured by MCA.

In the unlikely event of cable failure, the safety system is triggered automatically. This system prevents injury caused by a falling door. Therefore, when a cable breaks, a steel blade stops the door from falling.

SPRINGS FAILURE SAFETY SYSTEMS

All MCA industrial sectional doors have galvanized steel torsion springs. Springs are calculated depending on the size, weight and average daily usage. Springs have a very important role in the usage of a sectional door. Their role is to keep the door in balance, regardless of the position where the door was left. In the unlikely event of spring breakage an automatic door lock system is activated instantaneously. This ensures reliability and safe operation.

SAFETY EDGE SYSTEM

Industrial sectional doors can be equipped with safety edge system. This system is composed from an optical sensor installed in a balloon-type seal that is mounted on the lower edge of the door. If the light beam is interrupted when encountering an obstacle, a door stop command is instantly transmitted to the operator.

PHOTOCELL SAFETY SYSTEM

Optionally, industrial sectional doors can be accessorized with a photocell system. The interruption of the light circuit made by the two sensors mounted on the door poles will automatically stop the descending door.

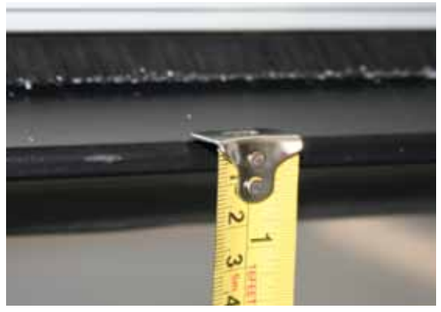
Types of Wicket Doors

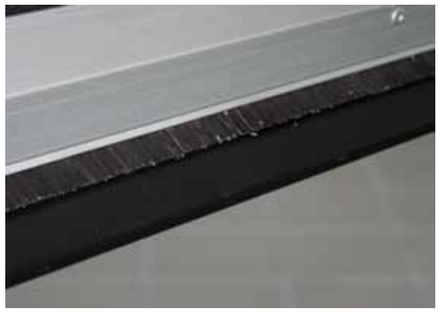
WICKET DOORS

Industrial sectional doors generally have large surfaces and opening them completely is not always necessary. This is the reason, why a wicket door is needed. There are two types of wicket doors: with a low-step threshold (3 cm) and with a normal threshold (15cm)

LOW STEP WICKET DOORS

The threshold is integrated into the sectional door and it being lifted with the door. Although it is very narrow, the threshold has a high resistantce. Sectional doors with low step wicket door allow easy access into the production area without opening the entire sectional door. The threshold has two rubber seals for optimum thermal insulation.





INDUSTRIAL SECTIONAL DOORS GLAZING

More light, more transparency

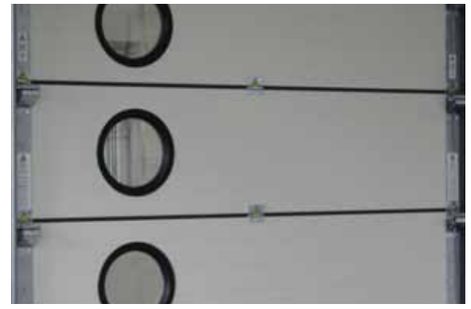
GLAZING FOR SECTIONAL DOORS

Clients that need inudstrial doors often require glazed sectional doors. These can be built in accordance with any construction plan, whether the purpose is to use natural lighting or the architect aims for transparency.

Industrial door fully glazed with low step wicket door.

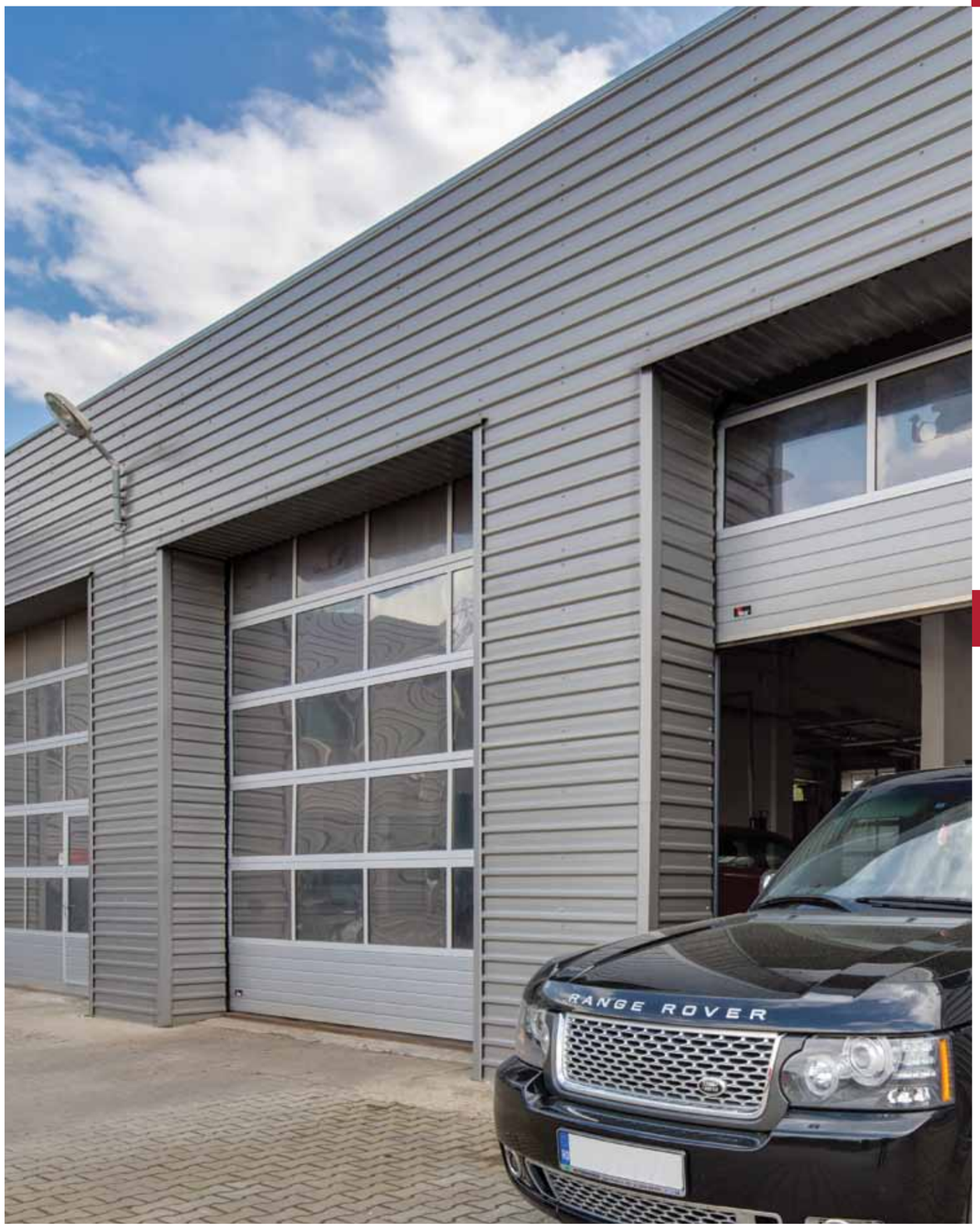
GLAZING TYPES

640x340/610x140 rectangular windows (black)



round window or oval 725x325 D = 330 (black)

SLIDING SYSTEMS



Common features

SECTIONAL DOOR PANELS

All the sectional doors are using the same panels. They are filled with polyurethane foam with excellent isolating properties. At the same thickness, the foam gives a double degree of isolation comparing with polystyrene. Galvanized steel sheet panels are filled with 40 mm polyurethane foam. When using the embossed (woodgrain, stucco) panels the steel sheet has 0.5 mm thickness and when using the slick panels the sheet has 0.7 mm thickness.

RELIABLE SAFETY SYSTEMS

All the doors have a standard configuration regarding the safety systems. All the doors are equiped with a cable break device / spring break device. These systems prevent the door from falling in the unlikely event of spring or cable failure. For electrically operated doors there is a safety system that is measuring the force in order to stop the operator in case the sensors detect an obstacle in the door's descending path. Optionally, for electrically operated doors, Safety Edge System and Photocells System can be integrated.

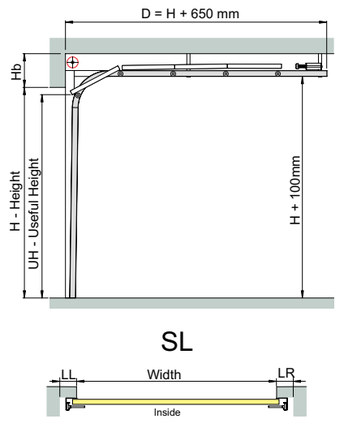
WICKET DOORS

Wicket doors can be fitted into any industrial sectional door. There are some restrictions regarding the position of the wicket door inside the sectional door. In addition, a low step wicket door can be integrated into the sectional door for access inside without lifting the entire sectional door. The threshold is lifted with the sectional door. Although it is very narrow, the threshold is very resistant. The threshold has two rubber seals for optimum thermal isolation.

DEVELOPMENT OF NEW SOLUTIONS

The MCA technical engineers are working continuously to find solutions to the clients' demands and improve the quality of the products. Meeting the customers' demands makes the difference between MCA and other sectional door manufacturers. Investing in research and development is the reason for which MCA became #1 sectional doors manufacturer in the Balkans area, Romania and Hungary.

STANDARD LIFT

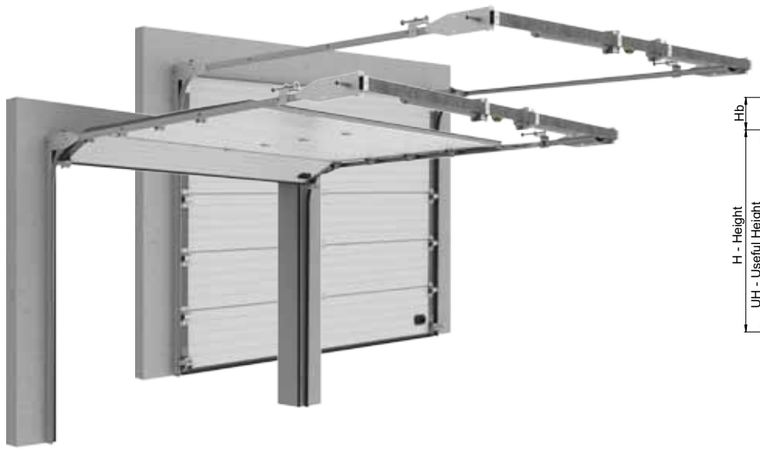


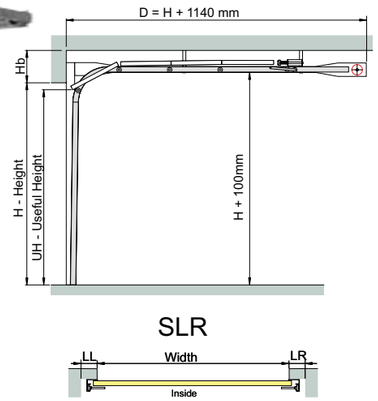
STANDARD LIFT (SL)

The StardardLift system is the most comon solution for sectional industrial doors. The springs systems is mounted on the beam.

Standard Lift system is used more frequently in cases where the lintel Hb has a minimum of 280mm, for manual operation, and a minimum of 320mm, for electrical or chain hoist operation.

STANDARD LIFT REAR



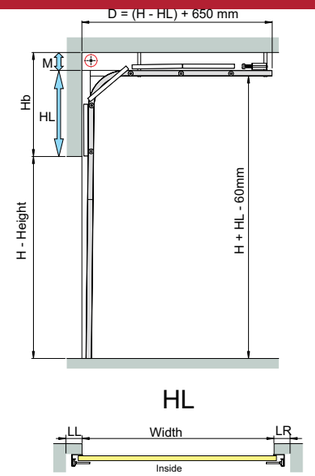


STANDARD LIFT REAR (SLR)

The Stardard Lift Rear sliding system is designed to be used in cases where the beam is very short. In order to overcome this issue the spring are mouted in the rear of the sliding tracks.

The anti-spring braking system is installed also in the back of the tracks.

HIGH LIFT

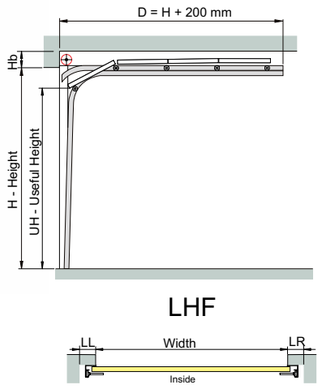


HIGH LIFT (HL)

The HighLift system is designed to make more efficient use of the production space, first lifting the door panels vertically, along HL, and then horizontally.

The High Lift system is the optimal solution for the efficient space usage in industrial areas, where high lintels occur. M (420mm) is the minimum space required for installation of the springs.

LOW HEADROOM FRONT



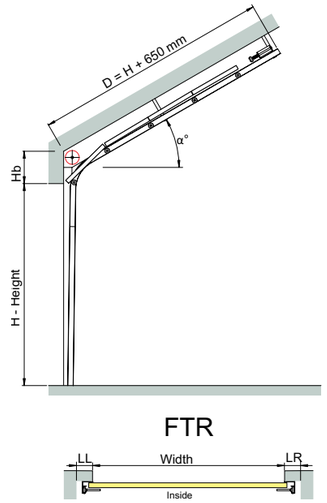
LOW HEADROOM FRONT (LHF)

The Low Headroom Front system is designed to be used in cases when the garage has a small lintel. The springs are mounted on the lintel and the lifting system has double horizontal tracks.

Except for the first panel, all the other panels are running along the upper horizontal track of the system.

The useful height (UH) will be smaller than the height of the opening (H).

FOLLOWING THE ROOF

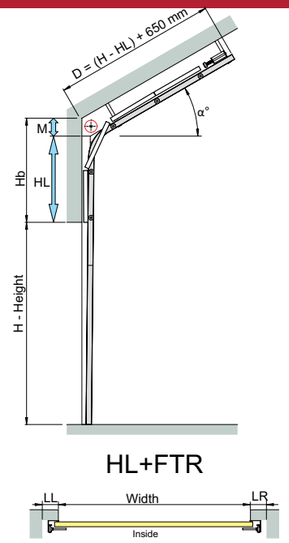


FOLLOWING THE ROOF (FTR)

The Following The Roof System was designed for industrial spaces with sloping ceilings, but without having a high beam. This system follows the roof slope.

The Following The Roof System system allows slopes up to 45º. This ensures an aesthetically and practically system. There are no bars or cables that descend from the ceiling support.

HIGH LIFT + FOLLOWING THE ROOF

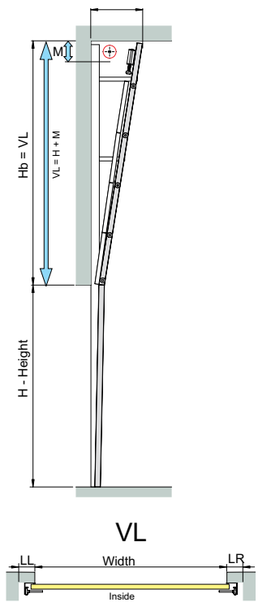


HIGH LIFT + FOLLOWING THE ROOF

The HighLift+Following The Roof systems is a combination between the two systems. This combination aims a more efficient use of space and it is a versatile system that meets the customers' demands.

If the beam is greater than 420 mm and the ceiling is angled, using this system will maximize the efficiency of space. Elevation is determined by the difference between the height of the beam and spring mounting space, **M** (420 mm). The system allows a ceiling angle up to 45º.

FULL VERTICAL LIFT



VERTICAL LIFT (VL)

the Vertical Lift system is the most commonly used model when talking about very high industrial buildings, allowing the vertical lifting of the door. This is useful when it comes to production spaces where cranes and other high production machines need to get very close to the door.

In order to install a VerticalLift system, the beam should be greater than the double height of the door + 670mm. The door will glide almost parallel to the beam.

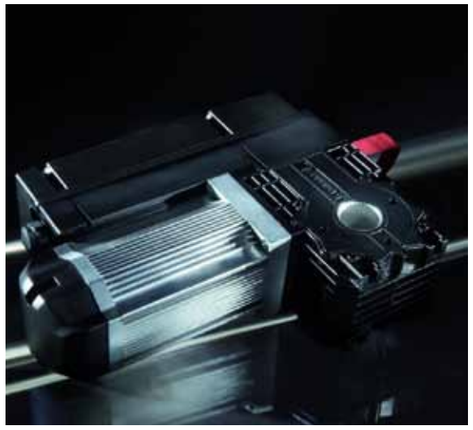
Maximum dimensions for industrial garage doors

	Maxim	Minim
Width[mm]	8000	1300
Height[mm]	6790	1600
Surface[sqm]	35	-

Industrial Sectional doors - dimensions and requirements

Width	Height	Type Sliding system	Hb			M	D	LL/LR			HL	UH	
			Manual	Chain hoist	Electric operator			Manual	Chain hoist	Electric operator		Manual	Chain/EL op
W<=5000	H<3000	LHF	240	280	260	Hb	H+200	100/100	100/250	100/350		H-100	H-30
		SL	280	320	320	Hb	H+650	100/100	100/250	100/350		H-120	H-30
		SL-R	190	190	190	Hb	H+1140	100/100	100/250	100/350		H	H
		FTR*	420	420	420	Hb	H+650	100/100	100/250	100/350		H	H
		HL	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		HL+FTR	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		VL	H+M	H+M	H+M	420	500	100/100	100/250	100/350		H	H
	H = 3000÷3500	LHF	350	350	350	Hb	H+200	100/100	100/250	100/350		H	H
		SL	420	420	420	Hb	H+650	100/100	100/250	100/350		H-150	H
		SL-R	190	190	190	Hb	H+1140	100/100	100/250	100/350		H	H
		FTR*	420	420	420	Hb	H+650	100/100	100/250	100/350		H	H
		HL	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		HL+FTR	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		VL	H+M	H+M	H+M	420	500	100/100	100/250	100/350		H	H
	H>3500	LHF											
		SL	420	420	420	Hb	H+650	100/100	100/250	100/350		H-150	H
		SL-R	190	190	190	Hb	H+1140	100/100	100/250	100/350		H	H
		FTR*	420	420	420	Hb	H+650	100/100	100/250	100/350		H	H
		HL	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		HL+FTR	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		VL	H+M	H+M	H+M	420	500	100/100	100/250	100/350		H	H
W > 5000	H<3000	LHF	280	280	280	Hb	H+200	100/100	100/250	100/350		H-100	H-30
		SL	320	320	320	Hb	H+650	100/100	100/250	100/350		H-120	H-130
		SL-R	190	190	190	Hb	H+1140	100/100	100/250	100/350		H	H
		FTR*	420	420	420	Hb	H+650	100/100	100/250	100/350		H	H
		HL	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		HL+FTR	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		VL	H+M	H+M	H+M	420	500	100/100	100/250	100/350		H	H
	H = 3000÷3500	LHF	350	350	350	Hb	H+200	100/100	100/250	100/350		H	H
		SL	420	420	420	Hb	H+650	100/100	100/250	100/350		H-150	H
		SL-R	190	190	190	Hb	H+1140	100/100	100/250	100/350		H	H
		FTR*	420	420	420	Hb	H+650	100/100	100/250	100/350		H	H
		HL	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		HL+FTR	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		VL	H+M	H+M	H+M	420	500	100/100	100/250	100/350		H	H
	H>3500	LHF											
		SL	420	420	420	Hb	H+650	100/100	100/250	100/350		H-150	H
		SL-R	190	190	190	Hb	H+1140	100/100	100/250	100/350		H	H
		FTR*	420	420	420	Hb	H+650	100/100	100/250	100/350		H	H
		HL	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		HL+FTR	HL+M	HL+M	HL+M	420	H-HL+650	100/100	100/250	100/350	Hb-M	H	H
		VL	H+M	H+M	H+M	420	500	100/100	100/250	100/350		H	H

INDUSTRIAL OPERATORS



	MARANTEC	MARANTEC	Gfa Elektromaten	Gfa Elektromaten
	XS BASE 60/24 | XS BASE 95/19	**XS Plus 60/24 | XS Plus 95/19**	**TSE 5.24 – 25.4 WS | SE 9.24 – 25.4 WS 900**	**SE 5.24 – 25.4 WS | SE 9.24 – 25.4 T961**
Drive torque (Nm)	60 | 95	60 | 95	50 | 90	50 | 90
Speed rpm.	24 | 19	24 | 19	24 | 24	24 | 24
Door surface / door weight	20sqm / 250 kg | 45 sqm / 550 kg	20sqm / 250 kg | 45 sqm / 550 kg	20sqm / 250 kg | 45 sqm / 550 kg	20sqm / 250 kg | 45 sqm / 550 kg
Working cycle %	25 | 60	25 | 60	40 | 60	40 | 60
Power (V/AC)	230 | 380	230 | 380	230 | 380	230 | 380
Temperature (C°)	-20...+60	-20...+60	-5 - +40	-5 - +40
Protection class	IP65	IP65	IP 54	IP 54
Axis	25,4	25,4	25,4	25,4
Input for photocells	No	Yes	No | Yes	Yes
Control panel	Yes	Yes	Yes	Yes
Entry for safety edge	No	Yes	No	Yes
Output for warning light	No	Yes	No	Yes
Input for remote control unit	No	Yes	No	Yes
Traffic control	No	Red	No	No | Red
Chain operation	Yes	Yes	Yes	Yes

CONTROL PANEL

Each door's automation kit always comes together with a control panel.

REMOTE CONTROL

Optionally, industrial sectional doors can be operated by a remote control. This requires the installation of a radio receiver.

SAFETY EDGE

The electric doors can equipped with an optical sensor mounted on the bottom edge.

TRAFIC LIGHTS

In common parking lots, traffic lights can be installed to control traffic and avoid bottlenecks.

PHOTOCELLS

Photocells system can be mounted on the side pillars. The system will stop the descending of the door if an obstacle is detected.

GEAR CHAIN

The doors that are higher than 4 m are fitted with a gear chain to operate them in case of a power failure.