

COMMERCIAL & INDUSTRIAL ROLLER SHUTTERS



www.keypenk.com



KEYPENK IS ONE OF THE FIRST OPERATORS OF MOTORIZED ROLLER SHUTTER MADE OF GALVANIZED STEEL IN TURKEY SINCE 1993.

ABOUT US



MURAT UYSAL
General Manager

Keypenk is one of the leading manufacturers of motorized roller shutter systems in Turkey. The company manufactures automatic roller shutters made of galvanized steel in Turkish market since 1993. From the beginning the focus of the company has been increasing the quality and providing variety with a modern and innovative production system. As the industrial processes developed, the company stepped forward with its reduced production lead times and high-quality products, both for ready to be installed and for not assembled components. Keypenk is currently located on a 2.800 m² building in Istanbul, Turkey.

SPECIALIST TEAM

MISSION

We work hard to satisfy our customers' needs by providing safe, high-quality and long-lasting rolling shutters with excellent services.

VALUES

EXCELLENCE

"We produce high-quality products and superior services to ensure the same level of satisfaction both during and after the purchase."

SAFETY

"We ensure safe and secure operating systems and end products to cause no unnecessary harm"

BEING PART OF THE SOLUTION

"Our team is ready to combine variety of tools we have to find out the problem, solve it and provide a live and exceptional experience for our customers."

TEAMWORK

"We work together to meet the needs of our customers and help the company grow"

HONESTY

"We are accountable for delivering on our commitments."

CUSTOMER PARTNERSHIP

"Our customers are our partners. They are the priority. We want to build strong and reliable relationships as well as long-lasting ones."



WHAT WE SPECIALIZE IN?

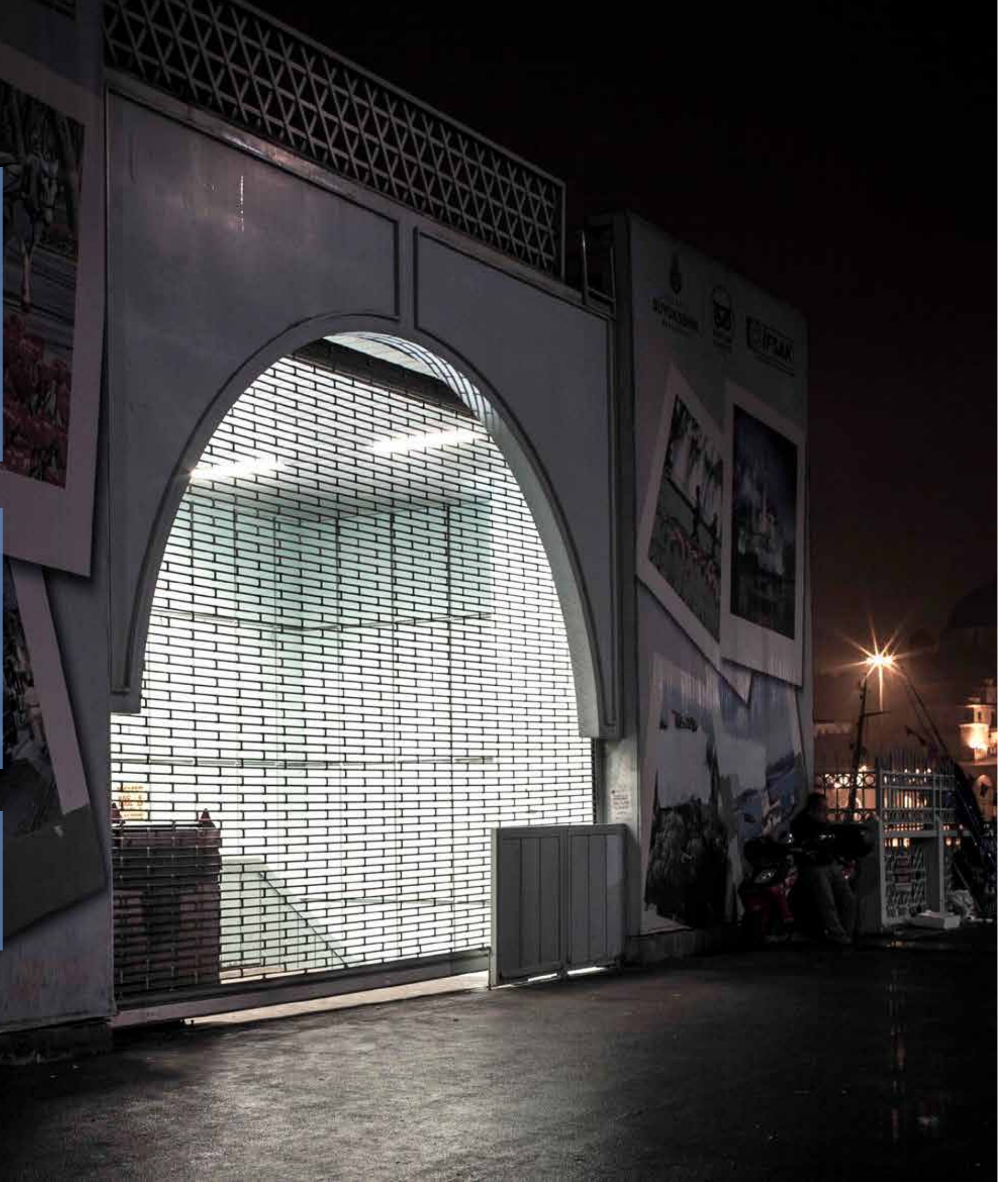
- Long Lasting & Reliable Products
- Extreme Dimensions
- Short Lead Time
- "Right Product, Right Price, Right Time"
- "On the Field" Problem Solving
- After Sales Services
- Long-term Business Relationship

WHY CHOOSE US?

- High quality products and superior after-sales solutions
- Fully responsive team for all customer needs
- Expert in over-sized doors
- Very short lines
- International partnerships with high-quality brands:
Single supply point for related products and accessories

ARCHITECTURAL SUPPORT

Our in-house architectural support team is available to work alongside our clients.



COMPLETE PROCESS

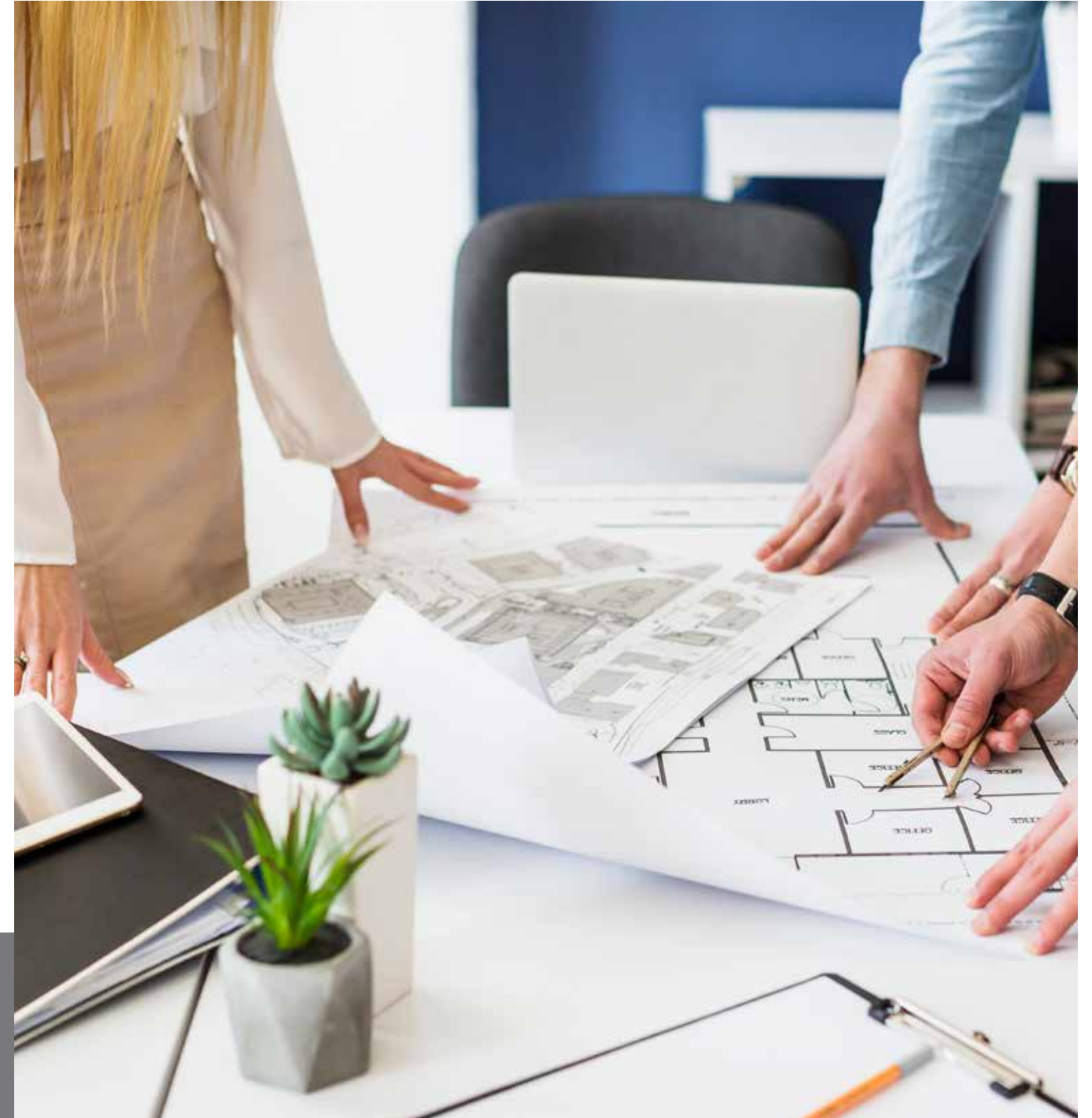
We are working hard to ensure client satisfaction by understanding and answering their expectations effectively from start to finish. Our team is highly experienced to foresee every problem and discuss possible solutions. Our company policy is to be transparent and honest with our clients, to paint a clear picture of possible results and to provide clear timelines.

FROM START TO FINISH ALL PROCESS HANDLED BY KEYPENK



BEFORE INSTALLATION

- Tailor made door design considering the customers' needs
- In-house architectures and experienced technical sales team are aware of the unique door features that are prioritize by different clients such as usage, aesthetics concern, the need of superior security, resistance to wind or fire, field conditions, mounting surfaces and energy efficiency. In the light of our experienced electronics team, feedbacks from our architects and technical sales team, we provide the best electronic components and meet all special requests where possible.
- This service is provided on location to discuss your individual or regulatory requirements and is free of charge with no obligation.



MANUFACTURING PROCESS

- Keypenk has produced more than 100.000 units of roller shutters in 25 years.
- The doors are manufactured in Istanbul factory with modern methods, computer-controlled machines. The components that are not produced in-house is carefully selected and controlled by our experienced factory team. During this process occupational health and safety regulations are met and all related certificates are obtained.



INSTALLATION PROCESS

- We are providing installation services to homeland and foreign countries. Our teams are working effectively and respect timelines and safety regulations. They are ready to meet the expectations of our clients. In case of any unexpected construction conflict, they are reactive to find a rapid solution on site.
- Generally, when overseas customers prefer supervision or support our well chosen highly competent supervisors connect employees and site management on construction site. They control the installation process by leading the installation team and training them with on-site applications.
- Keypenk operates in many continents, from Africa to Asia and Europe by providing installation and services.

AFTER INSTALLATION



REPAIR POLICY:

Since we give great importance to choosing the right components, the cause of our manufactured damaged doors is time or usage. Our repair policy is to repair the damage and malfunctions first without causing higher costs to customer. When necessary, we change the spare part and give an extra guarantee period for it.



REPAIR & MAINTENANCE AGREEMENTS:

A maintenance agreement offers customer to have regular visits by our trained technicians in order to diagnose problems before failure so that the door never stops working



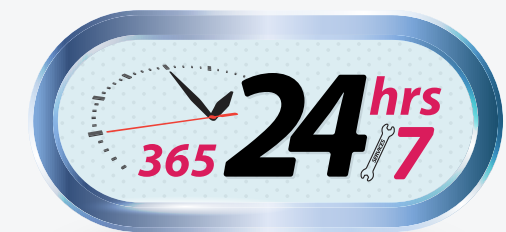
UPGRADES AND REPLACEMENTS:

Sometimes after installation customers' requirements change due to individual or regulatory reasons. From changing the motor type to adding safety and security components are provided.



GUARANTEE CONDITIONS:

2 years of system guarantee is available with all of our doors [Please check our website to see our guarantee conditions].

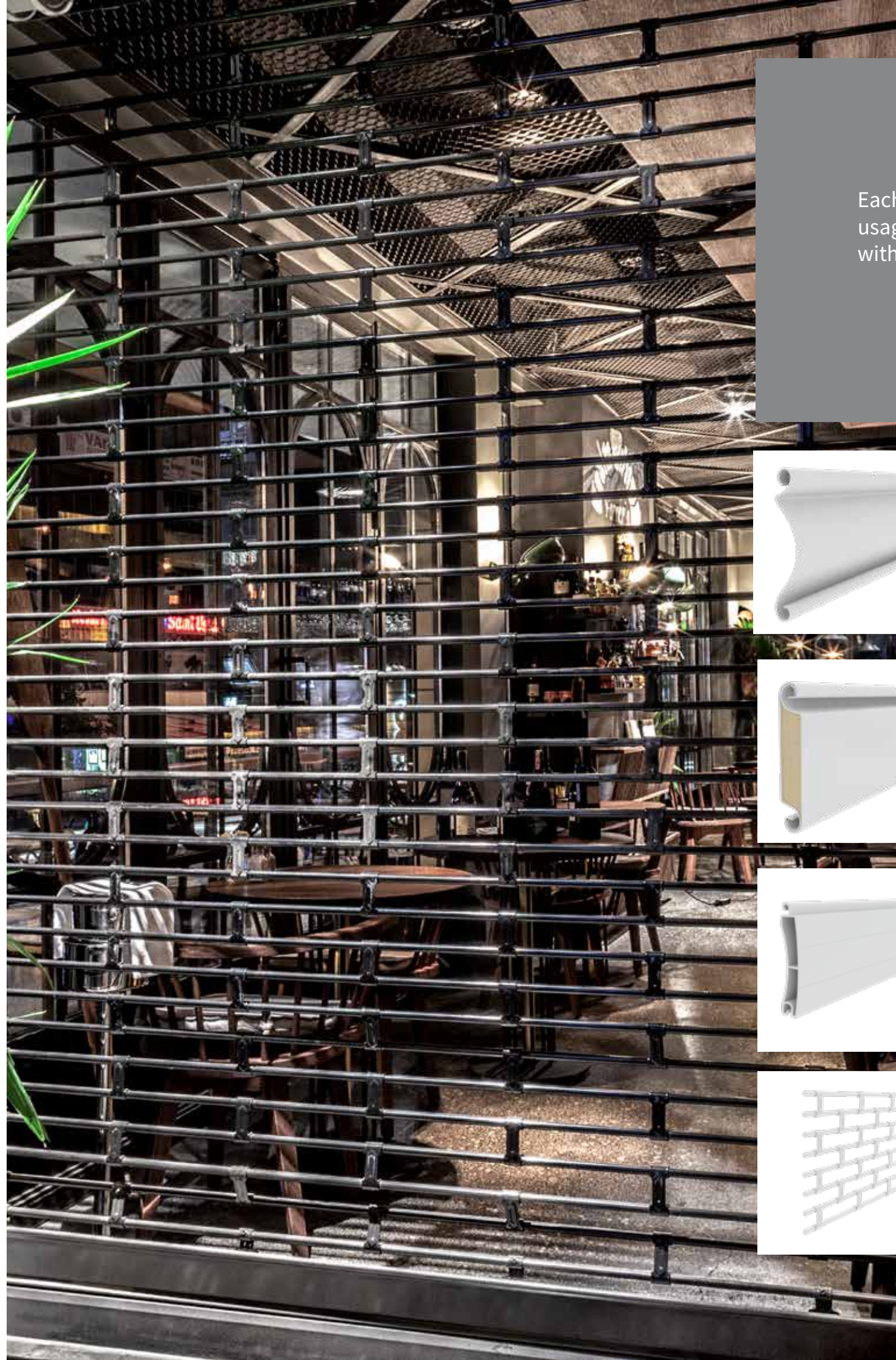


7/24 AFTER SALES SERVICES:

We are providing 24h/7d maintenance support. Our nationwide service teams conduct scheduled maintenance visits and on-field repairs. Generally, all spare parts are available in the vans stock to fix as quickly as possible. Emergency repairs are attended on the same day generally within 3 hours. For foreign customers there is always telephone support and in some cases distributors in foreign countries can always schedule a on-field repair.

DOOR CURTAIN RELIABLE SOLUTION FOR EVERY DIFFERENT REQUIREMENT

Designing a door starts with choosing the right profile for end-users expectations, architectural concerns and engineering rules. Here in Keypenk we always help end-user, architect or contractor to decide for the best solution for their building. We have different solutions -profile and bottom rail types- for different scenarios.



Each profile has different advantages and usage. Our job is to match the right profile with the requirements.



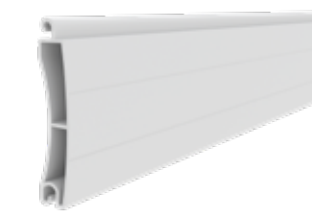
SINGLE SKIN PROFILES

- KP80 Curved Profiles
- KP110 Flat Profiles



DOUBLE SKIN PROFILES

- KP95 Insulated Profiles



EXTRUDED PROFILES

- KA77 Extruded Profiles



ROLLING GRILLES

- RG58 Brick Pattern
- RG77 Straight Lines





DOOR CURTAIN SINGLE SKIN PROFILES

Single-skinned profiles are most common profiles to use with Classic Roller Shutters, insulation and speed is not an important element. Because of the single skin design of the profile, the door is relatively cost effective and the drum area requires less space which fulfill architectural needs.

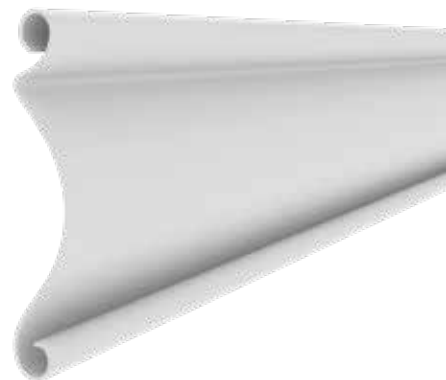
There are two different types of single skin profiles produced within Keypenk commercial & industrial roller shutters range: KP80 Single Skin Curved Profiles which provides a resistance, durability and possibility to go for bigger dimensions and KP110 Single Skin Flat Profiles which provides aesthetic but smaller size doors.



KP80
SINGLE SKIN
CURVED PROFILE



KP80 SINGLE SKIN CURVED PROFILE



80 mm height single skin curved profile available only in galvanized steel can be produced with different thickness according to the door size. This is the most common and recommended profile from our side for classical roller shutters. Special 80mm height curved design makes the door rigid and resistant compare to market standards.

Our special design permit us to go up to extreme dimensions such as 18 m length, or 10 m height. Again the design makes the door less noisy because the vibration during travel between guides is lower than flat ones.

FEATURES

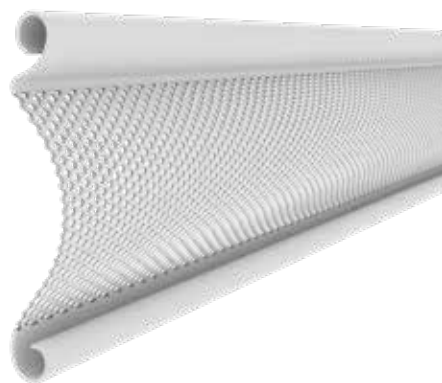
- Curved Design
- Cost-Effective
- Rigid & Resistant to all kind of forces
- Extreme Dimensions are possible. (Such as 18 m length)
- Less vibration compared to flat profiles



Find out more about the preferred and special colours on pages 62



KP80 SINGLE SKIN CURVED PROFILE MICROPERFORATION OPTION



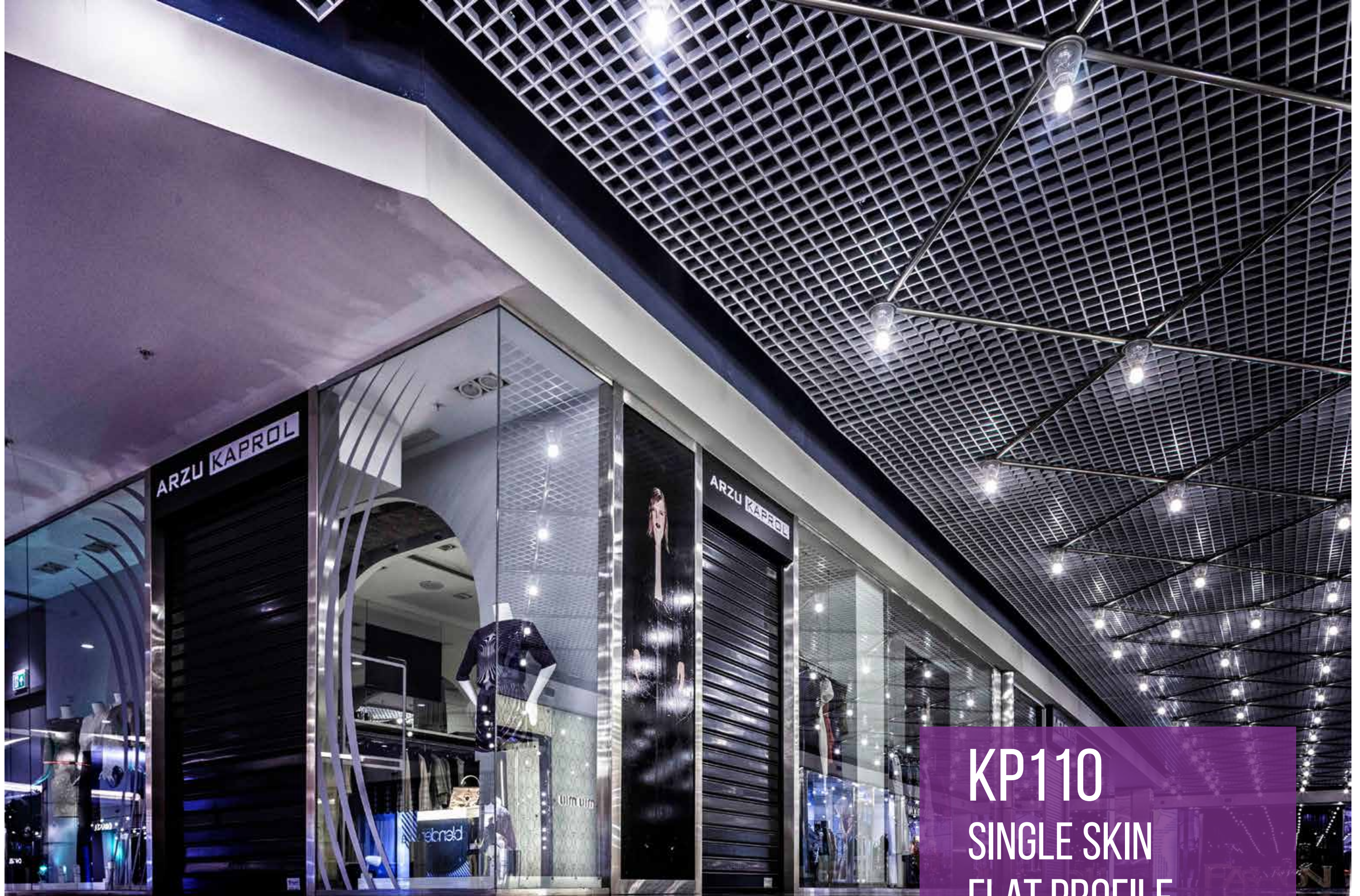
Microperforation on curved design KP80 profiles which provides ventilation & visibility together is possible. Microperforated profiles is produced with 4.0 mm diameter of holes on 0.8mm or 1.0 mm thick profiles with approximately 25% of air passage.

FEATURES

- 25% of air passage.
- 4.0 mm hole diameter
- Visibility & Air Passage
- Still resistant to force due to curved design



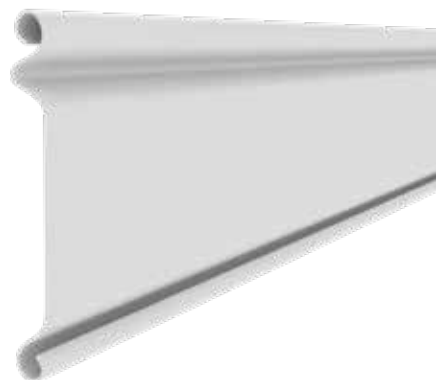
Find out more about the preferred and special colours on pages 62



KP110
SINGLE SKIN
FLAT PROFILE



KP110 SINGLE SKIN FLAT PROFILE



110 mm height single skin flat profile provides an esthetic solution to classic roller shutters with smaller sizes. This profile is a reliable alternative to curved profiles when customers need a flat design esthetic, vision panel or flat surface for on roller shutter advertisement. It is not possible to produce this profiles lower than 0.8 mm thickness because of the lack of curved design.

FEATURES

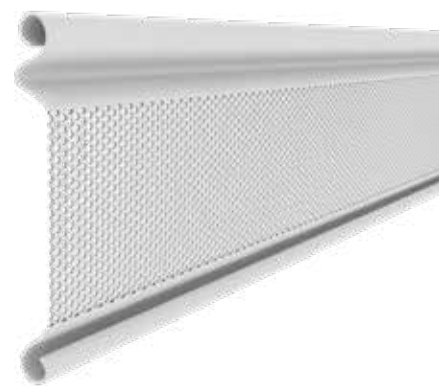
- Flat Design
- Esthetic Appearance
- Suitable for "on roller shutter advertisement"
- Optional Vision Panels



Find out more about the preferred and special colours on pages 62



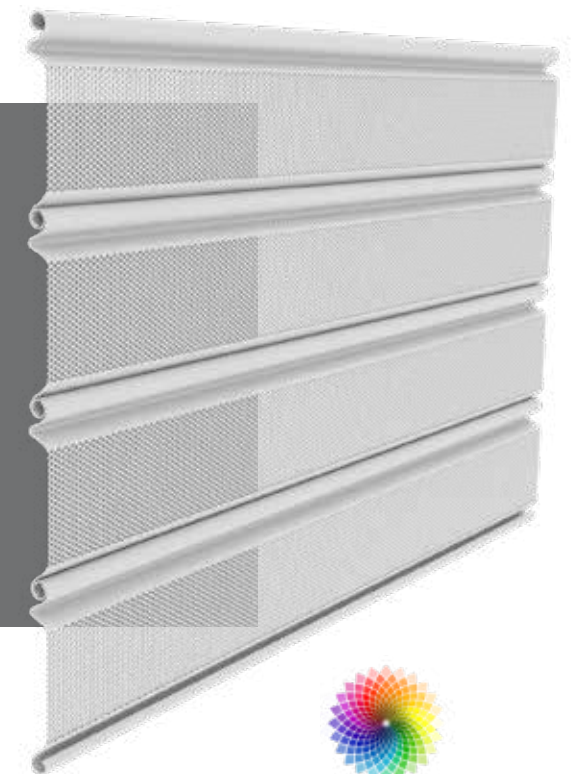
KP110 SINGLE SKIN FLAT PROFILE MICROPERFORATION OPTION



Microperforation on flat design KP110 profiles which provide both ventilation and visibility is possible. Microperforated profile is produced with 4.0 mm diameter of holes on 0.8 mm or 1.0 mm thick profiles with approximately 25% of air passage.

FEATURES

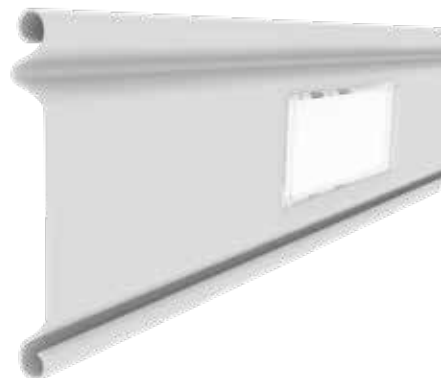
- 25% of air passage.
- 4.0 mm hole diameter
- Visibility & Air Passage



Find out more about the preferred and special colours on pages 62



KP110 SINGLE SKIN FLAT PROFILE VISIBILITY WINDOWS OPTION



KP110 flat profile is suitable for placing vision panels. 150 x 50 mm polycarbonate panel designed particularly for KP110 single skin flat profile brings the roller shutter vision without permitting ventilation.

FEATURES

- Polycarbonate panels
- Visibility without air passage
- Can be used without windows for air passage requirements



Find out more about the preferred
and special colours on pages 62



DOOR CURTAIN DOUBLE SKIN PROFILES

Double-skinned profiles are high-end option for roller shutters. Most common usage is with industrial applications. This kind of profiles are used for extended security, wind resistance, insulation need for the building. Because the profile is for industrial application there is more need for space for drum area.

There are two different types of double skin profiles produced within Keypenk Pro range: KP95 Double Skin Insulated Profiles made from galvanized steel which provides resistance, durability and possibility to go for extreme dimensions and KP95 S Double Skin Insulated Profiles made from aluminum which provides smoother action because of the material specifications and specific weight.

Optional accessories such as vision panels and ventilation slots are available for this profiles. The production method of the accessories provides minimum loss of heat resistance: laser cut operation is processed after placing the polyurethane foam or rockwool in the profiles. As a result, only the insulation level of this specific section is damaged. The polyurethane foam or rockwool is still being kept in the other sections of the profile.

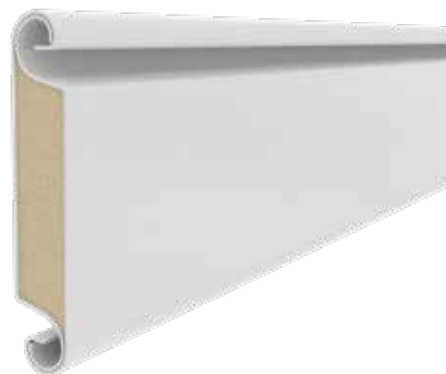


Shutter size L:8.400 mm H:11.500 mm

KP95
DOUBLE SKIN
INSULATED PROFILE



KP95 DOUBLE SKIN INSULATED PROFILE



KP95 double skin flat profiles have 95 mm height with approximately 21 mm thickness loaded with thermal insulated polyurethane. Besides polyurethane foam, profiles can be filled with rockwool for insulation. Galvanized steel and aluminum options are both available for double skin insulated profiles. KP95 profiles have a special design which makes the door extremely rigid. It is possible to produce extreme dimension-wind resistant doors with galvanized steel profiles. Even with aluminum profiles the size of the doors can attain 10 m length.

FEATURES

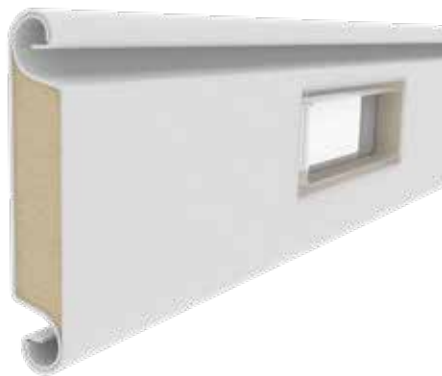
- Double skin rigid design
- 95 mm profile height (better than market standards)
- 20 mm thick heat resistance
- Insulation options: Polyurethane insulation or rock wool insulation
- Extreme dimensions with galvanized steel profiles
- Bigger dimensions with aluminum profiles compare to market standards
- Low level of vibration during travel between guides
- Less material noise
- Optional accessories: Vision panels or ventilation slots



Find out more about the preferred and special colours on pages 62



KP95 DOUBLE SKIN INSULATED VISIBILITY WINDOWS OPTION



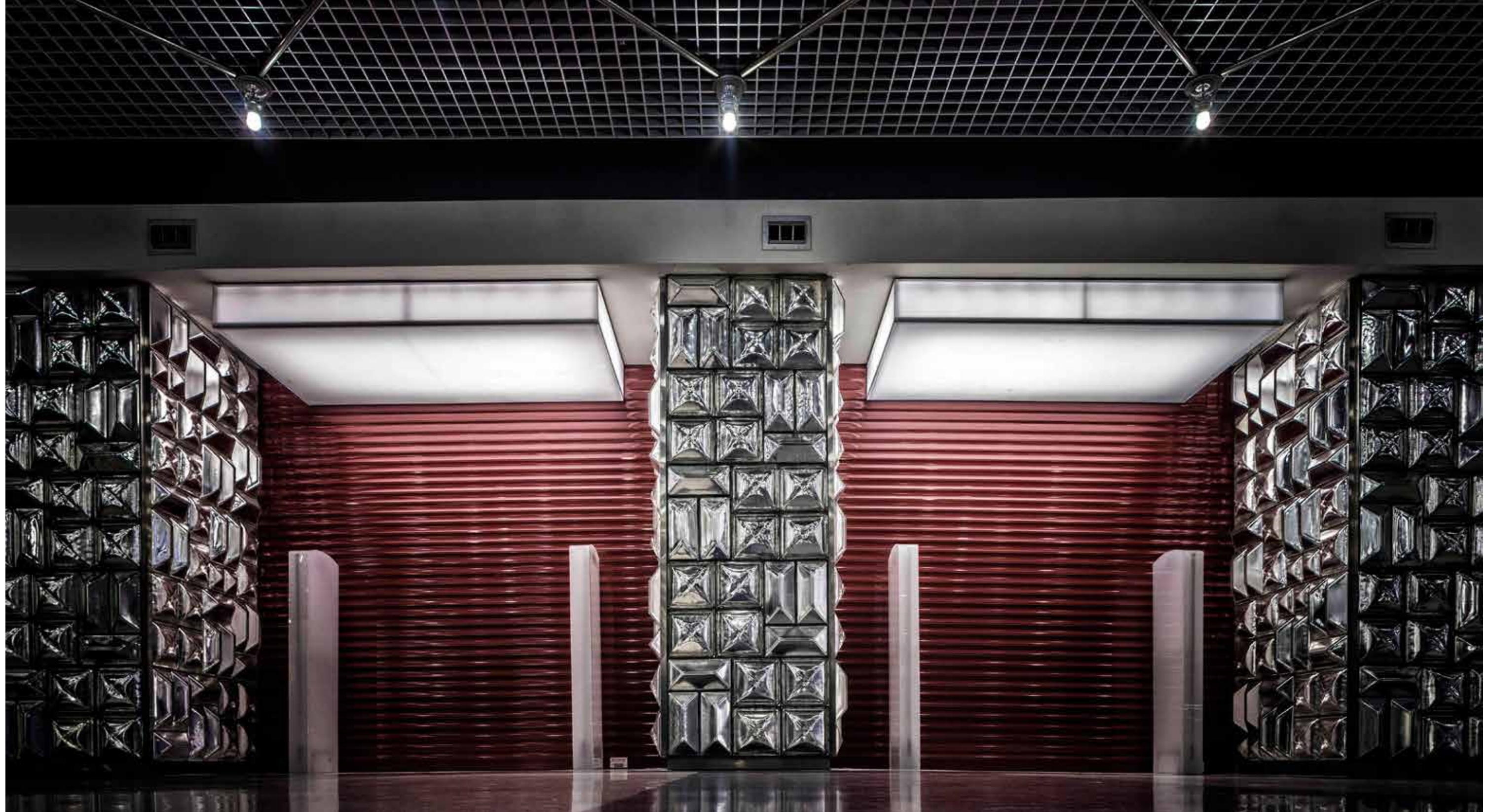
Visibility with minimum loss of insulation due to harmless laser cut production method. 150 x 50 mm polycarbonate vision panels designed particularly for KP95 double skin profiles bring the roller shutter visibility feature without permitting ventilation.

FEATURES

- Visibility without losing insulation
- Polycarbonate panels
- Laser-cut holes



Find out more about the preferred and special colours on pages 62

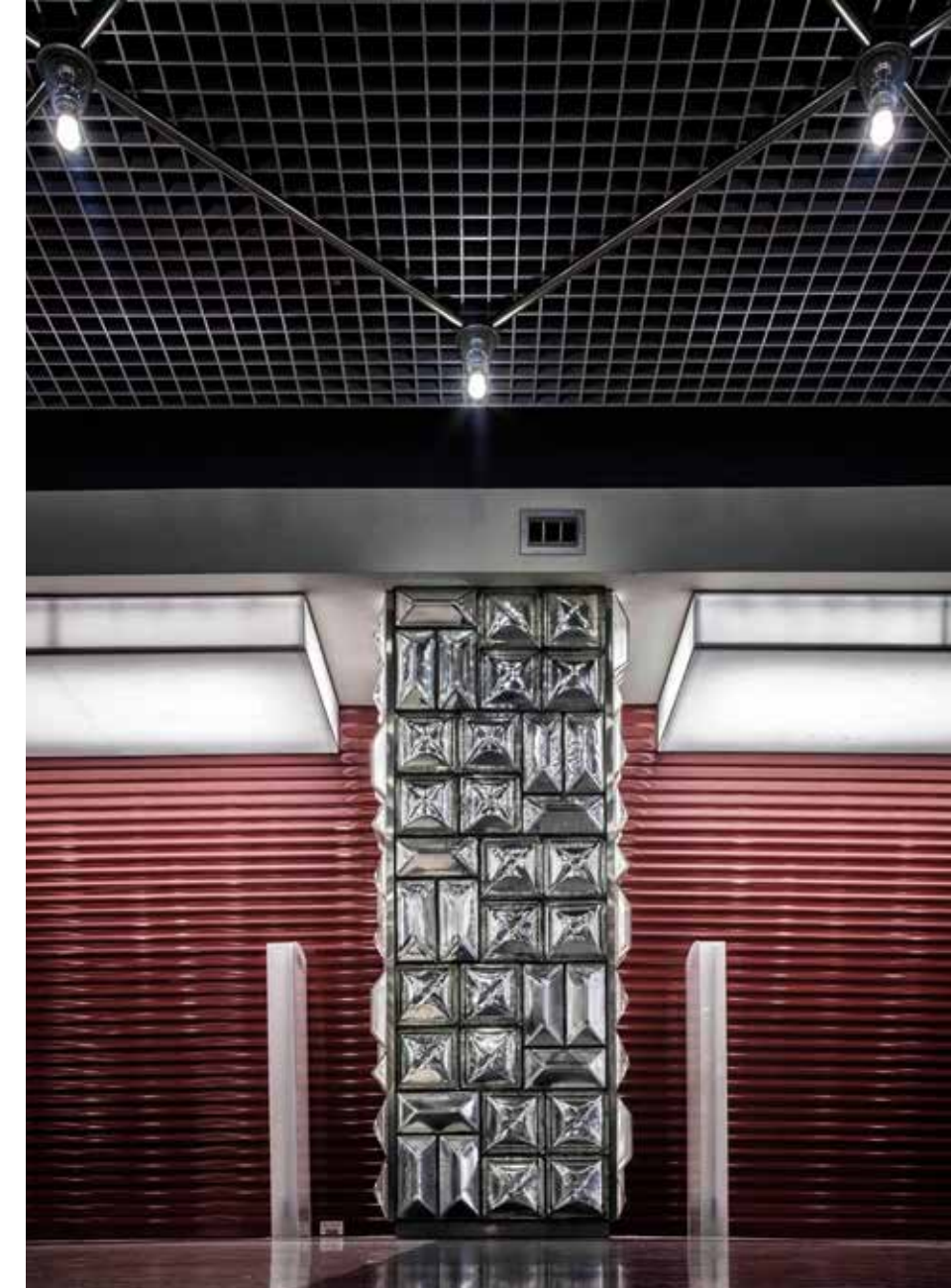


DOOR CURTAIN EXTRUDED PROFILES

Generally single skin or double skin profiles are solution for different needs. But we provide extrusion profiles for different concerns or architectural needs. With extrusion production method it is possible to produce different shapes compare to profiling method. With this production method only aluminum option is possible as profile material.



DOUBLE SKIN INSULATED PROFILE



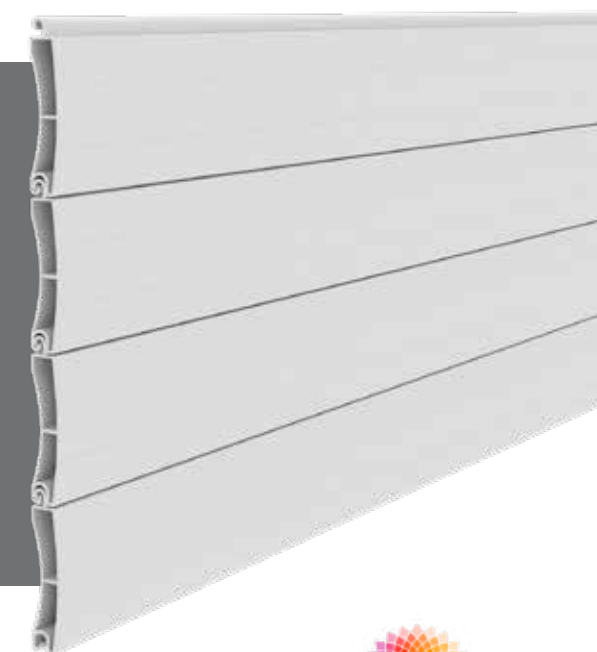
KA77 EXTRUDED ALUMINUM PROFILE



Extruded aluminum profiles are resistant profiles compare to standard mid-size door profiles. Another advantage is the raw material which is corrosion resistant and less noisy compare to galvanized profiles.

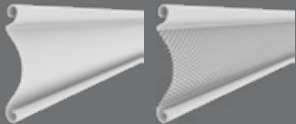
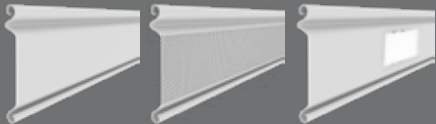
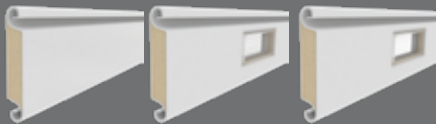
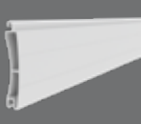
FEATURES

- Anti-Corrosion
- 77 mm profile height
- Less Noise
- Rigidity due to the wall thickness result of production technology



Find out more about the preferred
and special colours on pages 62

PROFILES COMPARISON TABLE

PROFILE MODEL	KP80	KP110	KP95		KA77
					
Material Production Method	Galvanized Steel Rollforming	Galvanized Steel Rollforming	Galvanized Steel Rollforming	Aluminum Rollforming	Aluminum Extrusion
Profile Height	77 mm	110 mm	95 mm	95 mm	77 mm
Curtain Weight					
0.6 mm	Approx 8.70 kg/sqm	Not Available	Approx 17.60 kg/sqm ¹	Not Available	Approx 12.75 kg/sqm
0.7 mm	Approx 10.30 kg/sqm	Not Available	Approx 20.35 kg/sqm ¹	Not Available	
0.8 mm	Approx 11.70 kg/sqm	Approx 10.30 kg/sqm	Approx 23.10 kg/sqm ¹	Approx 8.80 kg/sqm ¹	
1.0 mm	Approx 14.55 kg/sqm	Approx 12.95 kg/sqm	Approx 28.60 kg/sqm ¹	Approx 10.70 kg/sqm ¹	
Microperforation	Yes	Yes	No	No	No
Optional Accessories	Not Possible	Possible on Request ²	Possible on Request ²	Possible on Request ²	Not Possible
Windows	No	Yes	Yes	Yes	No
Ventilation Slots	No	No	Yes	Yes	No
Heat Transmission	No	No	Yes	Yes	No
Standard Insulation			Polyurethane Foam	Polyurethane Foam	
Optional Insulation			Rockwool	Rockwool	
Powder Coating	Yes	Yes	Yes	Yes	Yes
Standard Colors	15 Different Options	15 Different Options	15 Different Options	15 Different Options	15 Different Options
Special Colors	Whole Ral Catalog ²	Whole Ral Catalog ²	Whole Ral Catalog ²	Whole Ral Catalog ²	Whole Ral Catalog ²
Customized Colors	Possible on Request ³	Possible on Request ³	Possible on Request ³	Possible on Request ³	Possible on Request ³
Door Type	Standard Roller Shutter	Standard Roller Shutter	Professional Lines	Professional Lines	Standard Roller Shutter

1. PU included to the calculations
2. Extended delivery time and additional cost may apply

2. Extended delivery time and additional cost may apply.
Producing powder coating paint from a sample is possible but must be discussed during production process



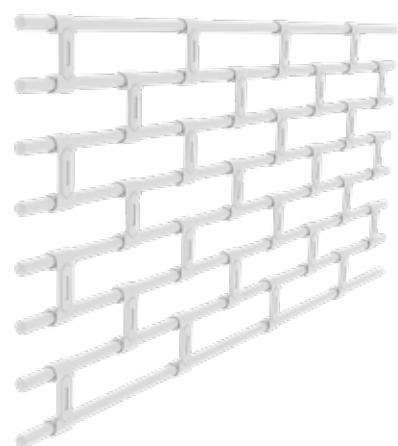
DOOR CURTAIN ROLING GRILLES

The doors made from rolling grilles are elegant looking, as secure as single skin profiles and as a bonus there is whole air passage and visibility from outside and inside. Nevertheless, bigger dimensions are possible, just more space needed for the drum area.

Doors can be produced from different materials such as galvanized steel, aluminum, anodized aluminum & stainless steel. There are also available accessories for securing connecting rods and tubes for some models.



RG58 BRICK PATTERN



The design of the curtain is brick pattern. These classic looking rolling grilles are robust and aesthetically pleasant. Tubes with a diameter of 14 mm pass through galvanized steel connecting rods with 2 mm thickness.



Find out more about the preferred and special colours on pages 62



RG77 STRAIGHT LINES



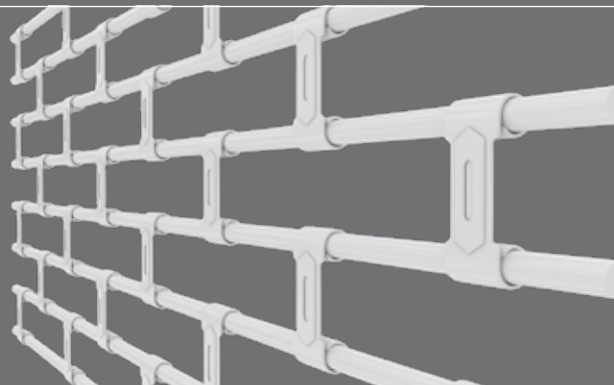
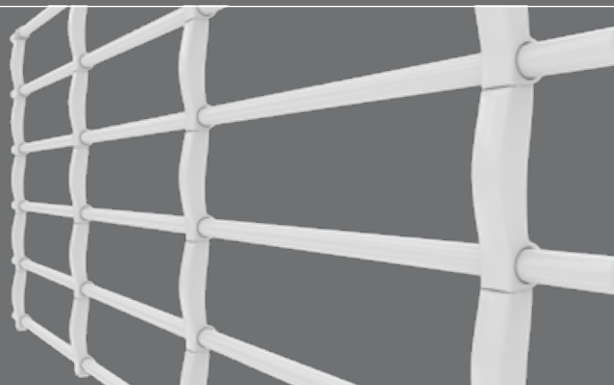
Straight lines pattern rolling grilles are elegant and modern looking. Tubes with a diameter of 14 mm pass through connecting rods. There are several material options such as galvanized steel, aluminum and stainless steel for both connecting rods and tubes.

There are additional accessories for securing the connecting rods and tubes as an option for resistance to burglary.



Find out more about the preferred and special colours on pages 62

PROFILES COMPARISON TABLE

PROFILE MODEL	RG58			RG77	
					
Distance Between Center of Tubes (H)	58 mm			77 mm	
Material Thickness	2.0 mm			1.5 mm	
Material Options	Galvanized Steel			Galvanized Steel Aluminum ¹ Stainless Steel ¹	
Horizontal Distance Between Links (L)	200 mm	300 mm	400 mm	200 mm	400 mm
Curtain Weight	Approx. 12.0 kg/sqm	Approx. 10.7 kg/sqm	Approx. 9.3 kg/sqm	Approx. 9.0 kg/sqm	Approx. 10.7 kg/sqm
Diameter of the Tube	14			14	
Powder Coating	Yes			Yes	
Standard Colors	15 Different Options			15 Different Options	
Special Colors	Whole Ral Catalog ¹			Whole Ral Catalog ¹	
Customized Colors	Possible on Request ²			Possible on Request ²	
Door Type	Standard Roller Shutter			Professional Lines	

1. Extended delivery time and additional cost may apply

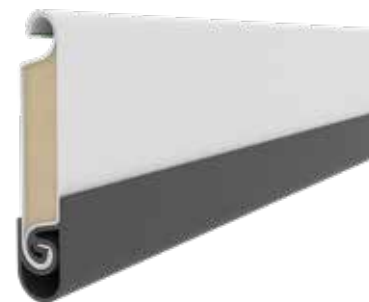
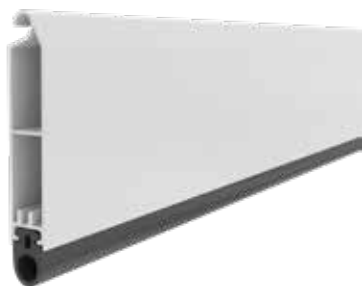
2. Extended delivery time and additional cost may apply.
Producing powder coating paint from a sample is possible but must be discussed during production process



DOOR CURTAIN BOTTOM RAIL PROFILES

Due to their reinforced design bottom rail profiles are highly deflection resistant. Generally, the weight of the profile is more than curtain profiles to supplement the rigidity of whole curtain.

Always used with rubber seal for optimal compensation of floor irregularities which prevents penetration of rain, water and dirt.



PROFILE MODEL	BTR-SB	BTR-SF	BTR-DP	BTR-95
Material	Aluminum	Aluminum	Aluminum	Galvanized Steel
Profile Height	110 mm	105 mm	130 mm	95 mm
Profile Weight	Approx 1.43 kg/m	Approx 1.16 kg/m	Approx 1.41 kg/m	Approx 1.60 kg/m
Production Method	Aluminum Extrusion	Aluminum Extrusion	Aluminum Extrusion	Rollforming
Compatible Curtain Profile	KP80, KP110, KA77 Rolling Grilles	KP80, KP110, KA77 Rolling Grilles	KP95	KP95



COMPONENTS

GUIDES

Guides produced with roller shutters are made from galvanized steel and determined considering resistancy needs both internally and externally. Production method is press brake method which is more precise compare to roll forming. This means the guides are %100 straight without any doubt. Thanks to raw material specialties and press brake method they are installation friendly. Wide variety of installation types such as welding and anchoring on different surfaces are always possible. Plastic strips for sealing & brush or only hard plastic strips are available for quiet travel with less vibration and also for dust protection.

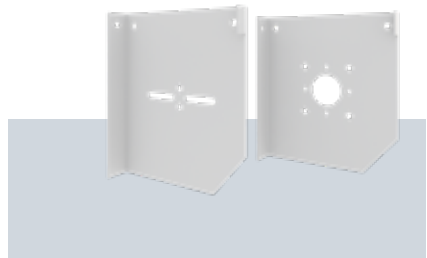


PROFILE MODEL	GD-07	GD-12	GD-GG
Material	Galvanized Steel	Galvanized Steel	Galvanized Steel
Production Method	Press Brake	Press Brake	Press Brake
Compatible Door Type	Standard Roller Shutter	Standard Roller Shutter Professional Lines	Professional Lines



COMPONENTS

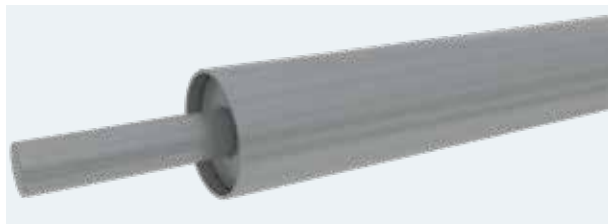
BRACKETS



There are variety of bracket models and sizes. Nevertheless, custom options are always available. The production method of the brackets are press brake and laser cutting. The reason we have several options is we produce the brackets considering motor and bearing sizes, drum requirements and requests of customers or architects. The main reason we use laser cut is we do not want to cut any holes during installation and we want the accessories to fit perfectly with the brackets.

BARREL

BARREL FOR TUBULAR MOTORS, SIDE DRIVES AND CHAIN DRIVES

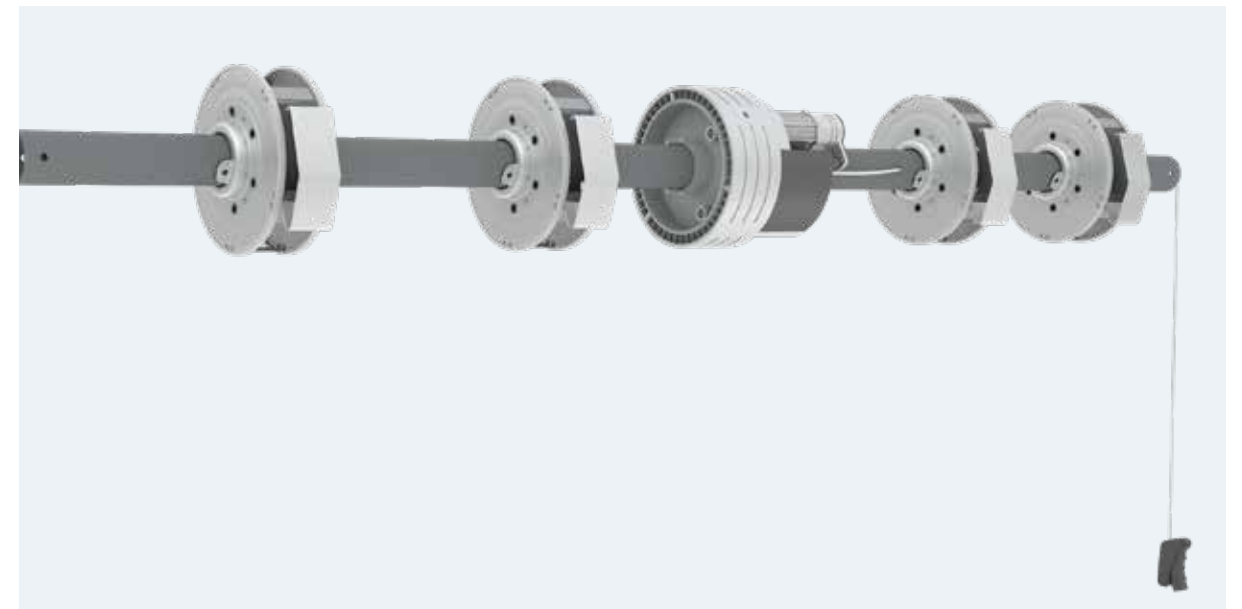


Diameter of the tube determined by the calculation made according to the width and weight of the shutter in order to ensure correct deflection. Directive EN 10220 allows maximum flexion of 1/500, this means with a 5.000 mm wide shutter deflection (maximum bending point measured) of the tube must be 10 mm (1/500) or 12.5 mm (1/400). Preparing shaft pipe with this rule improves the life of roller shutter and the drive.



CNC laser-cut flanges and hexagonal design axles perfectly match with pipe. Especially hexagonal axles improves the strength of shaft against horizontal forces caused by factors found under roller shutter. This improves the life of roller shutter and shaft.

BARREL FOR CENTRAL MOTORS



Diameter of the tube determined by the calculation made according to the width and weight of the shutter in order to ensure correct deflection. Directive EN 10220 allows maximum flexion of 1/500, this means with a 5.000 mm wide shutter deflection (maximum bending point measured) of the tube must be 10mm (1/500) or 12.5 mm (1/400). Preparing shaft pipe with this rule improves the life of roller shutter and the drive.

CERTIFICATE OF Endurance

We, the testing laboratory of Somfy Group, hereby certify that
the spring balanced metallic shutter of the company

Keypenk

has successfully passed our test of endurance of **10,000 cycles** with our motor range **Centreo**.

TEST N° TRP1647/000
RESULTS 10,000 cycles approved
REALISED 23.12.2011
METALLIC SHUTTER TYPE
Dimensions Width: 3360mm | Height: 2880mm (36 slats of 80mm) | Door net weight: 125.5kg
Axe Ø60mm | 4 spring boxes Ø220 with plastic protection
MOTOR Somfy Centreo 1 60/220, 230V/50Hz

Edouard THOMAS
Laboratory Manager

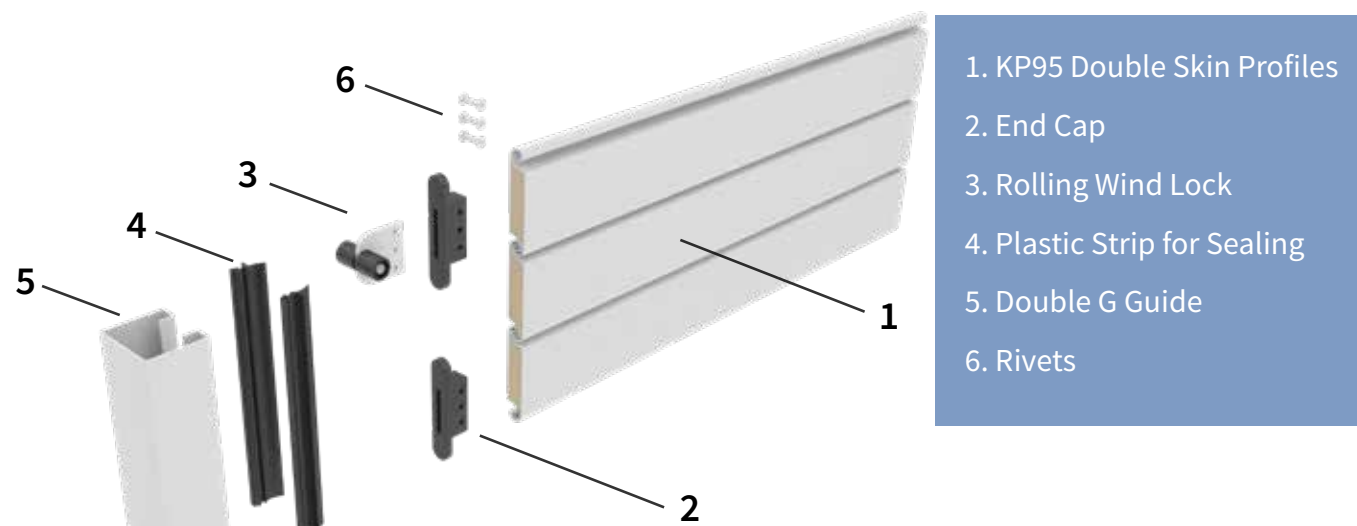
HOME MOTION by
somfy

Central Motor Shaft is tested at laboratory of Somfy Group and our spring balanced shaft successfully passed 10.000 cycles



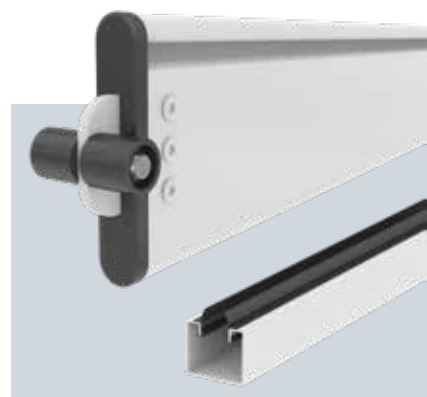
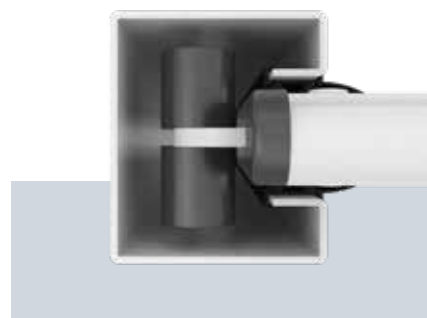
INNOVATIONS

DOUBLE G GUIDE & ROLLING WIND LOCKS



Special design double G galvanized rails and windproof rolling wind-lock system composed of steel wind locks with double nylon wheels make the door offer resistance to any kind of force both sides of the door (internal/external). The system is exclusively designed for KP95 double skin profiles. Again, the system brings a better security to the door due to the anti-intruder function of the double G shape guide.

Compared to standard guides, it is more resistant to intervention with tools like a crank because of rolling wind locks which hold up the door between guide rails. The plastic hard strips are used for sealing the door and the guide rails and again bring a quiet travel with less vibration.



- Steel wind locks with double nylon wheels
- Exclusive for KP95
- Security: Anti intruder function
- Wind load resistance on both sides (Internal External)
- Better sliding inside rails
- Plastic strips for sealing, quiet travel & less vibration
- Installation techniques such as welding on different surfaces

COMPARISON OF FORCE/WIND-RESISTANCE BETWEEN MODIFIED U, G & DOUBLE G GUIDES

Standard Modified U Shaped Guide Force Resistance



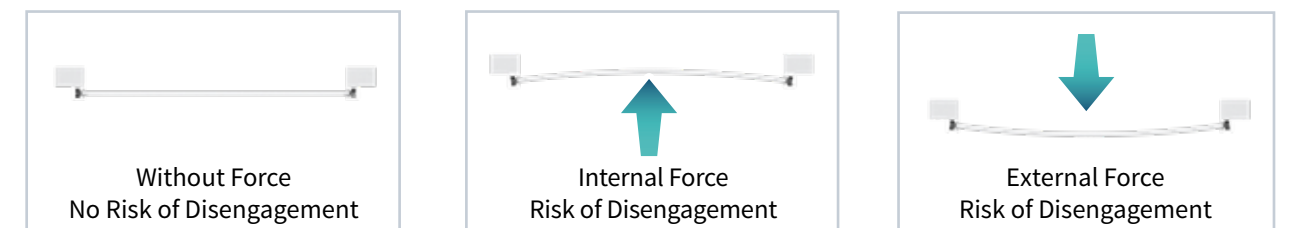
Curtain resistance to any kind of internal/external force but especially to wind is weaker. When the force starts to interrupt the curtain, it takes a circular deflected shape. As a result of this distortion, there is a huge risk of disengagement of the curtain from the rails.

G Shaped Guide Force Resistance



This is a better solution to resist one way forces (internal or external according to installation method). The curtain works in the rails with mechanical hooks which make it difficult to disengage it with only one way force. If the building has 2 doors, there is always risk of an opposite force while the other door is open. The mechanical hooks protect against external wind/force pressure but the curtain is open to internal forces and there is risk of disengagement of the curtain from rails.

Double G Shaped Guide Force Resistance



The curtain is protected from both internal and external forces with double G guides combined to rolling wind lock system. Compared to other type of guides, the curtain has a lower risk of forming a circular deflection shape after facing a force.



INNOVATIONS

SLIDING BRACKETS



Sliding brackets allow the axis to rotate when the diameter of the rolling curtain changes. This means that the curtain always enters the guides vertically without distortion. This improved fit of the shutter curtain to lintel brings important advantages to roller shutter.



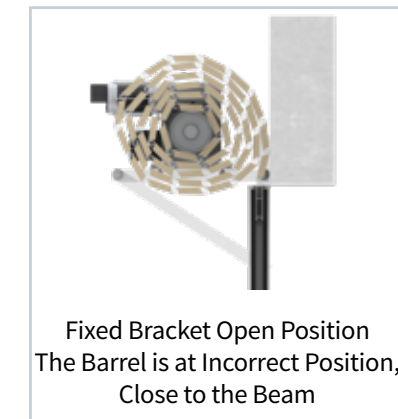
- Improved fit of roller shutter
- Decreased friction
- Longer service life
- Low heat loss- Improved energy class of the building
- Reduced operation noise
- Resistance to external forces
- Reduced height of the lintel
- No scratch marks on the curtain caused by lintel
- Curtain enters the side guides vertically in an position without distortion

FIXED BRACKETS COMPARISON

FIXED BRACKETS



The barrel does not find its correct position. Even after a precise installation, vertical entrance to the side guides is missed, therefore it produces distortion. The results are high heat loss, increased friction and noise . The main cause of these inconveniences is that there is minimum 16 degrees of gap between lintel and roller shutter curtain when the door is in a closed position. This gap



gets bigger if the height of the door increases. They all reduce the life expectancy of the door compared to the drives with sliding brackets. The risk becomes higher with the increase of the height of the shutter. Furthermore, because of the gap between lintel and rolling shutter curtain, using fixed brackets creates an air circulation canal.



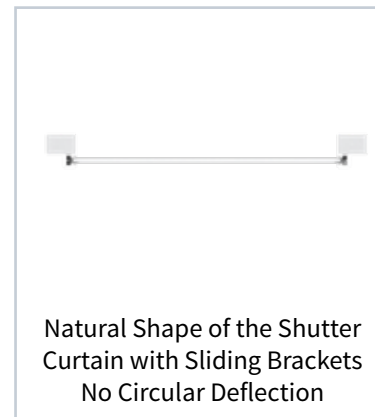
This canal is a contrary of the reason of preferring double skin profiles which is providing heat resistance to the building. Naturally the profiles get a circular deflected shape while using fixed brackets on horizontal view. This is the result of the distortion. Even without interruption, the door is less resistant to any external force such as wind load.



INNOVATIONS

FIXED BRACKETS COMPARISON

SLIDING BRACKETS

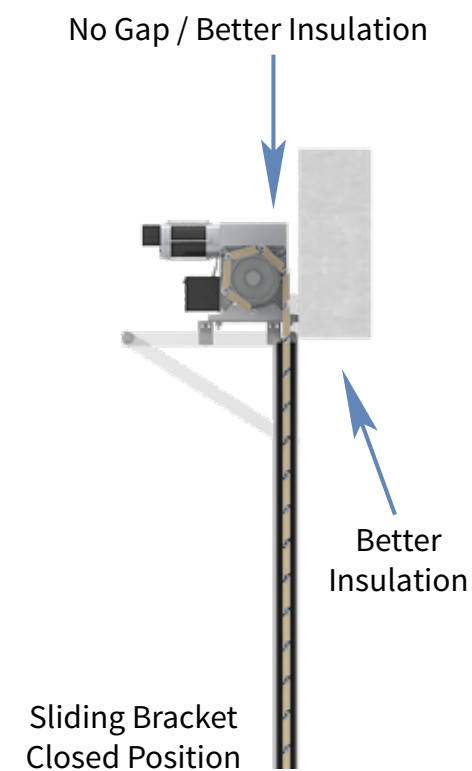
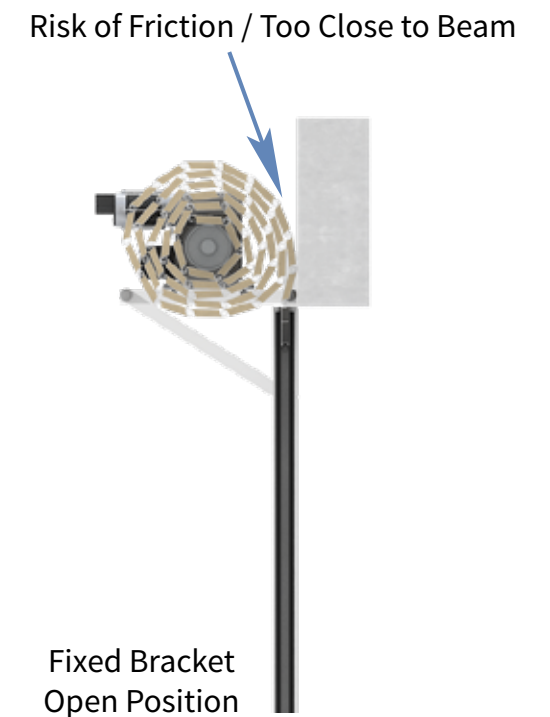
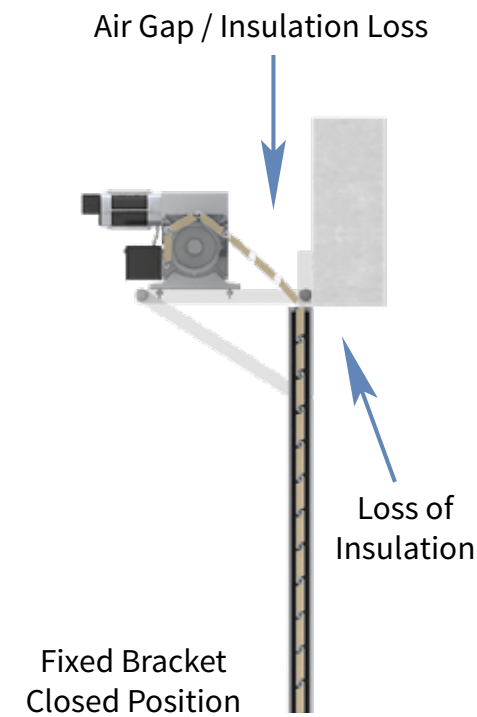


A door with sliding brackets is always away from lintel when the door is on opened position but the barrel moves towards the lintel without reaching to it. With the help of sliding brackets the door always enters to the side guides vertically. This means less friction, less noise and long life expectancy for the drive and shutter mechanically. Most important speciality of sliding brackets is that it is improving heat

resistence of the door. Even with extreme door heights, the gap between lintel and rolling shutter curtain is equal or smaller than 5 degrees which means that there is also an insulation protection from lintel side. This can be improved by installing a rubber on the lintel side.

Circular deflected shape of the profiles on horizontal view disappears. As the shutter enters the guide

always vertically on every position there is no distortion, it closes and fits tight to the lintel and the curtain becomes more resistant to external force interruptions. The fit position of the barrel helps the curtain absorb this forces. The height of the brackets and the hood size of the shutter is also reduced with the help of better fit.




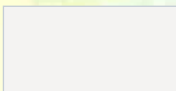

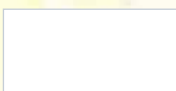




POWDER COATING

Commercial and Industrial Roller Shutters are painted with powder coating method. There are many benefits of using powder coating methods opposed to other conventional coating methods. First of all, along with other benefits powder coating offers, there is a wide range of colour to fit with the building and it's surrounding areas architectural needs for creative professionals. It is available in mat finish or shiny finish options. In addition to standard colors, customisation is also possible to answer your creative needs¹.

Powder coating offers exceptional toughness, impact-resistance and scratch/abrasion resistance to the metal. All kind of rolling doors and especially high cycling or high speed doors' life becomes longer compared to the doors coated with conventional methods. Besides powder coating technology can provide excellent corrosion and UV protection against harsh weather conditions and internal conditions of industrial environments, public areas such as airports, commercial complexes, shopping malls and shopping avenues. In addition to the packaging, powder coating protects the product against damage before installation; during mounting, handling and especially transportation. Production method consists of metal cleaning, preperation, curing in an oven which can fit with long dimensions up to 9-10m and hand-made operation with powder guns to cover every curling of the metal.

1. Extended delivery time and additonal cost may apply. Please contact us for custom requests.

STANDARD COLORS*

	RAL 9006 - Grey (White Aluminum)		RAL 8003 - Clay Brown
	RAL 9003 - Signal White		RAL 6024 - Traffic Green
	RAL 9010 - Pure White		RAL 6029 - Mint Green
	RAL 9005 - Jet Black		RAL 1021 - Colza Yellow
	RAL 1015 - Light Ivory		RAL 2004 - Pure Orange
	RAL 3003 - Ruby Red		RAL 7016 - Anthracite Grey
	RAL 3020 - Traffic Red		RAL 7039 - Quartz Grey
	RAL 5002 - Ultramarine Blue		

- Wide range of colors: Endless possibilities to inspire your imagination
- Durability / improve the life of roller shutter
- Corrosion resistant
- Impact resistant
- Abrasion resistant
- High eesistance to dirt pick up
- Easy maintenance
- Cover all edges with no drips
- Heat reflective
- UV resistant
- Chemical resistant
- Smoother finish compared to conventional coating methods

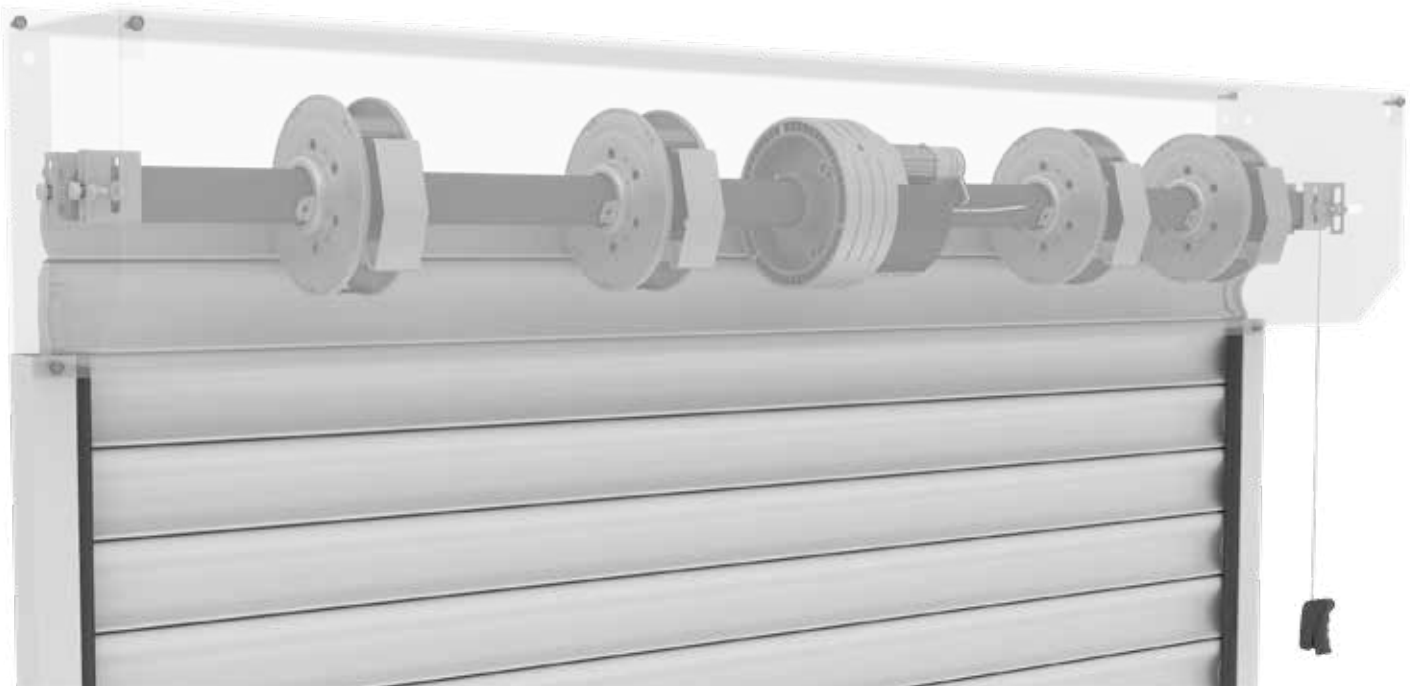
*Color representations should be used as a guideline.

The powder coating must be seen on metal/aluminum samples if the color is vital for the project. Different powder coating producers' Ral Color Charts may not match each-other



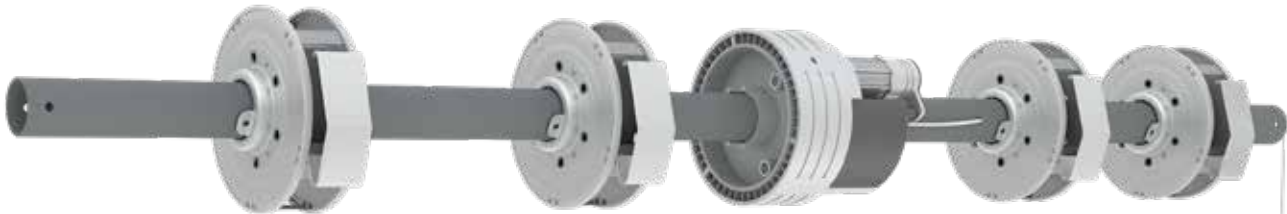
DRIVES

CENTRAL MOTORS



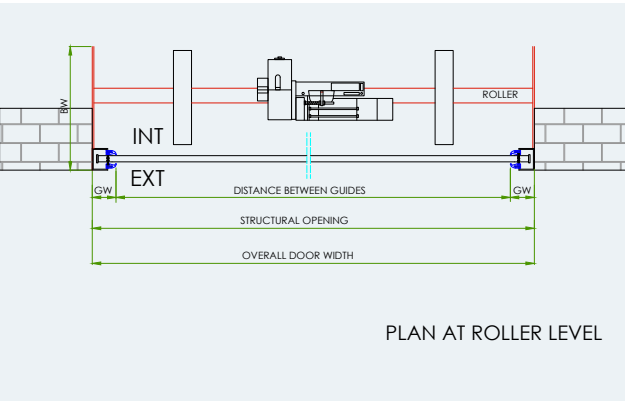
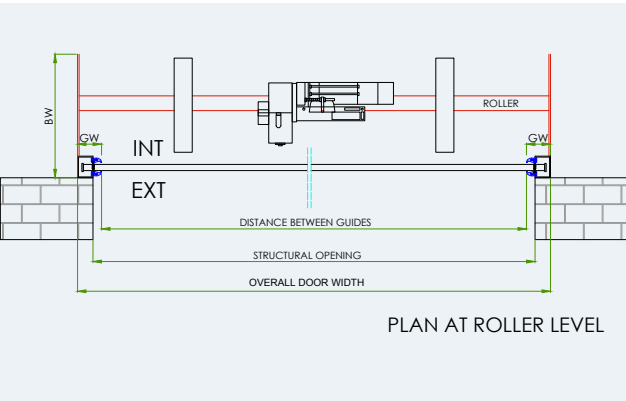
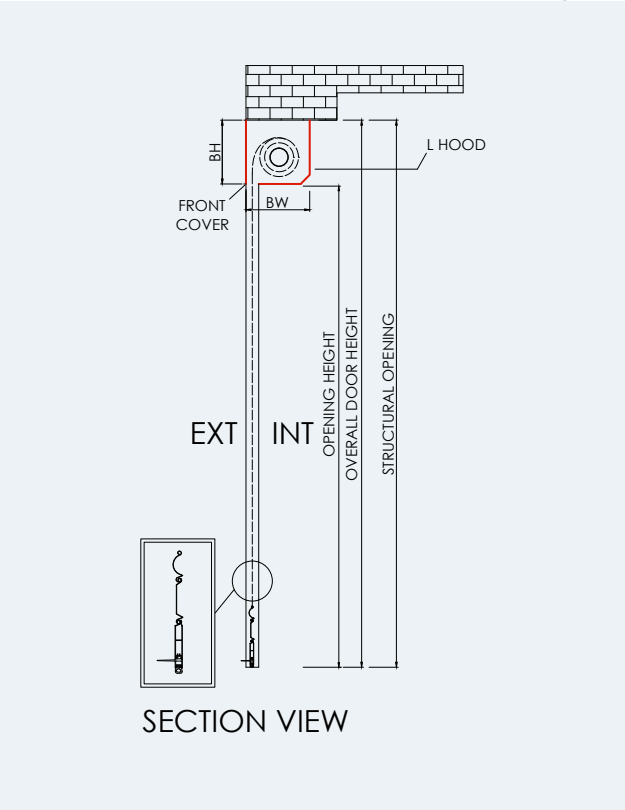
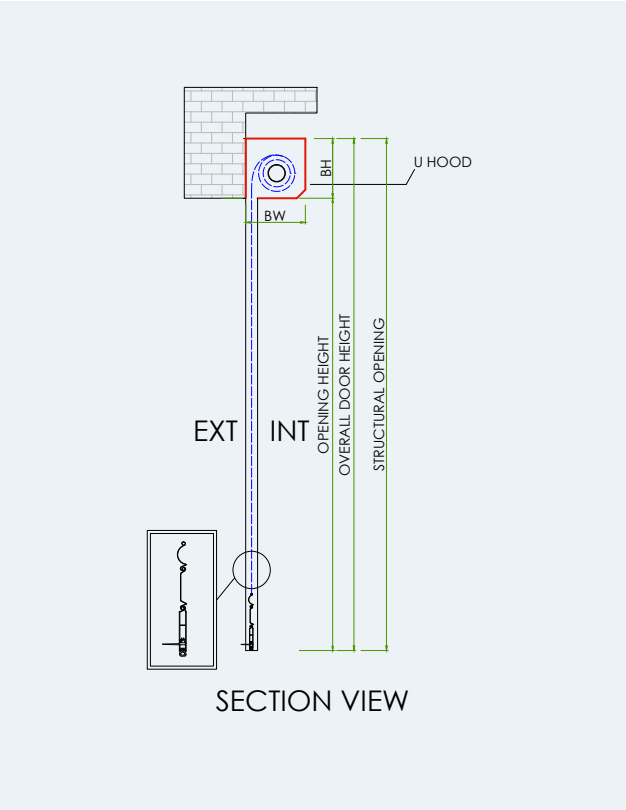
Central motors generally used for metal curtain or grilles with a balancing spring system. The motor is placed at the center of the shaft and as a result extra motor space is saved. Again, spring balanced shaft system can be easily and manually operated in an effortless way during power blackout. The declutching system can be inside or outside with a safebox and it makes the motor totally free and allows the curtain to be manually and effortlessly operated in case of power failure. These motors can only be used with doors not heavier than 350 kgs, spring balancing system is also only used with doors no larger than 20 sqm. These motors are not convenient for frequent usage.

- Easy manual operation during power blackout
- No additional space for motor
- Built-in brake inside the motorization
- 10.000 cycles possible
- Torque guaranteed through the entire operation
- Easy maintenance – no need to disassemble whole shaft for maintenance
- Not suitable for frequent usage



FACE OF WALL INSTALLATION

BETWEEN JAMB INSTALLATION



BW	Bracket Width
BH	Bracket Height

MPW	Motor Plate Width
MPH	Motor Plate Height

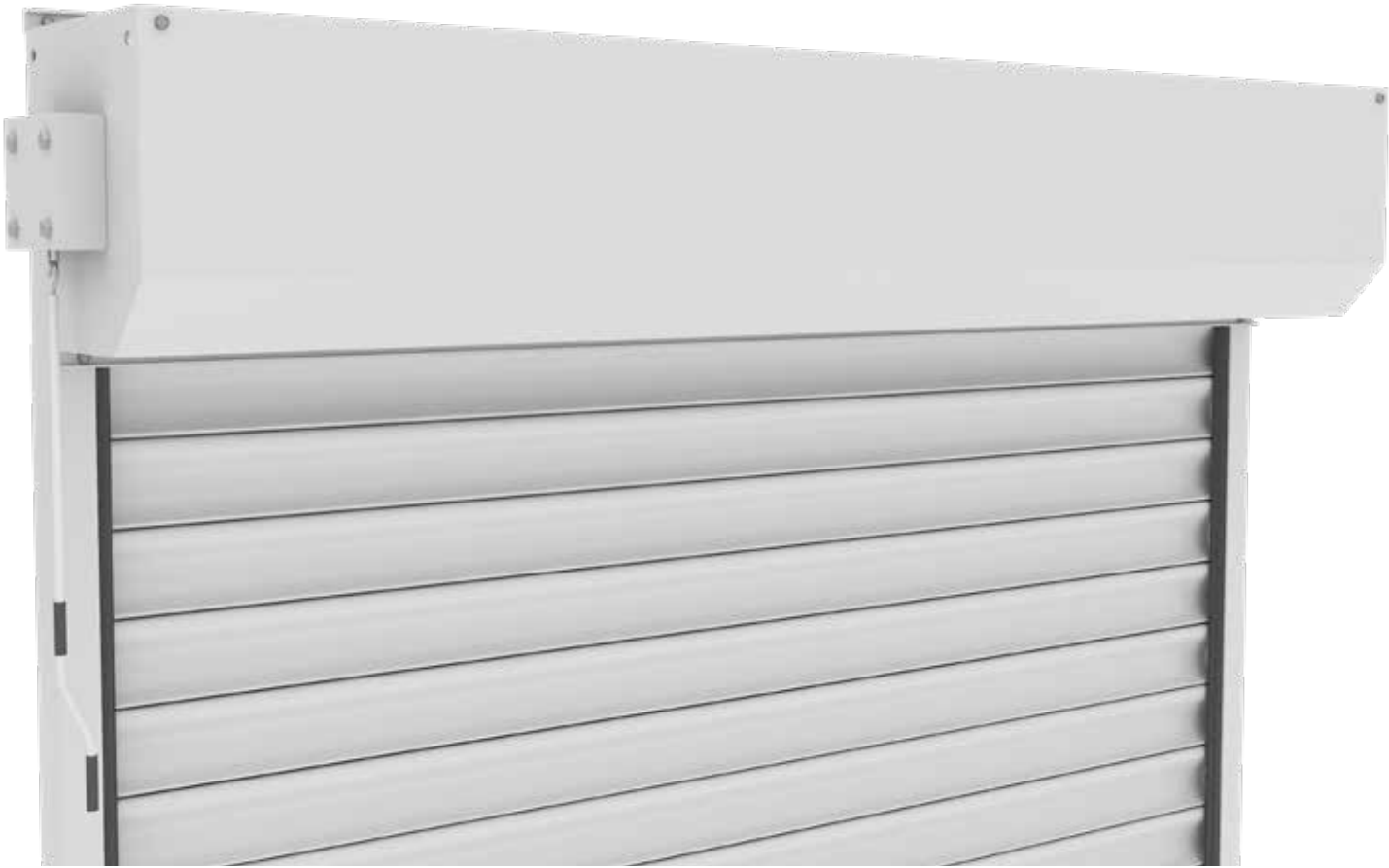
MW	Motor Width
B.W	Bearing Width
GW	Guide Width

SP	Steel Profile
CSW	Chain System Width



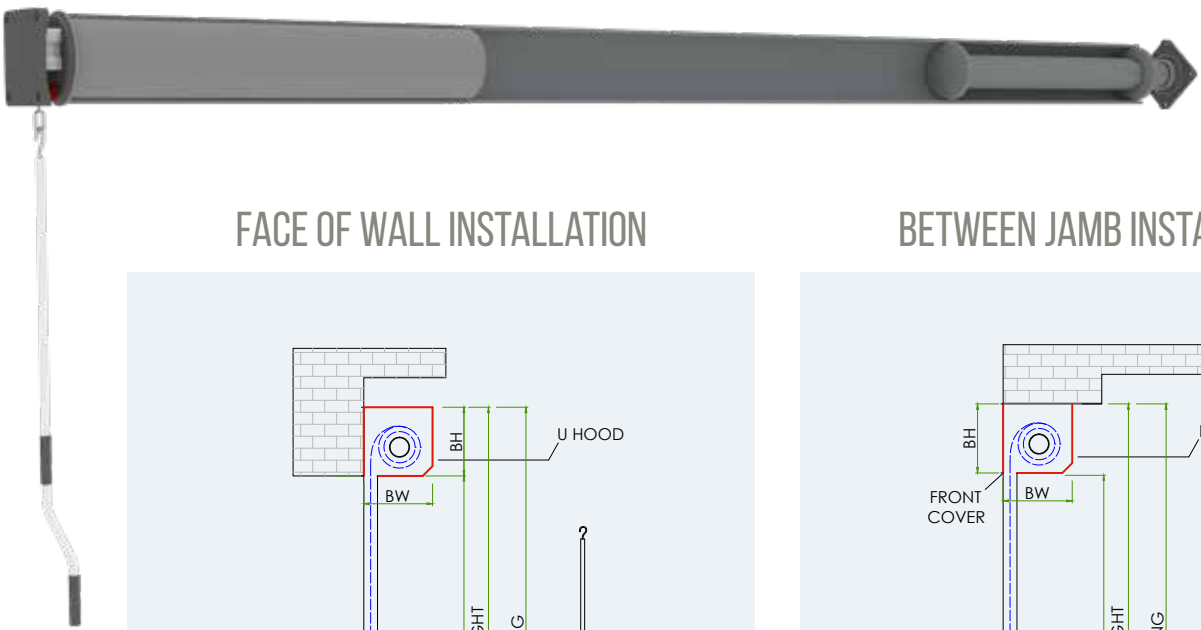
DRIVES

TUBULAR MOTORS



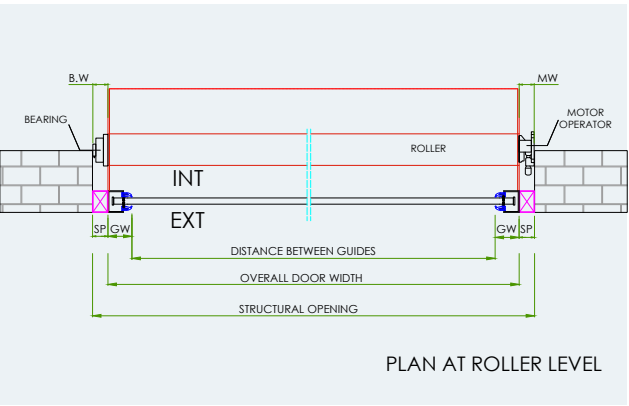
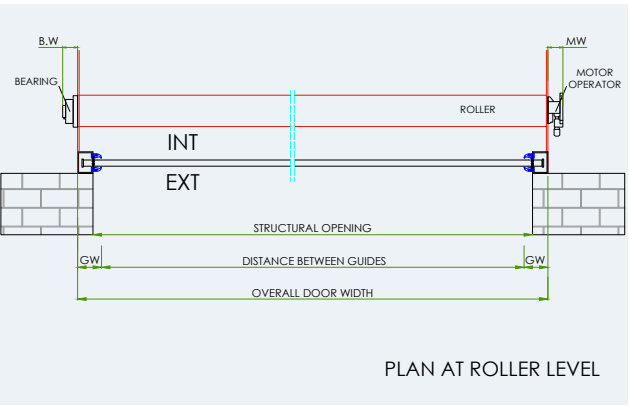
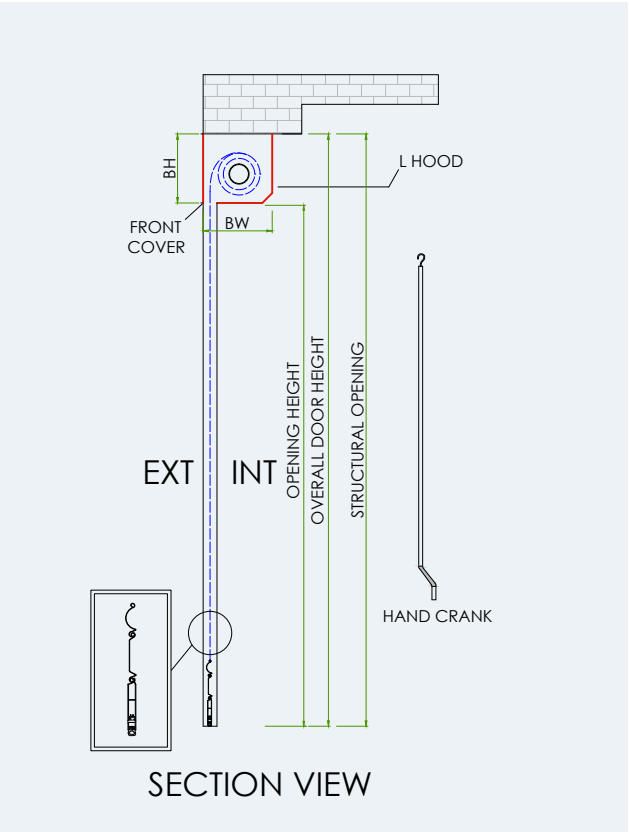
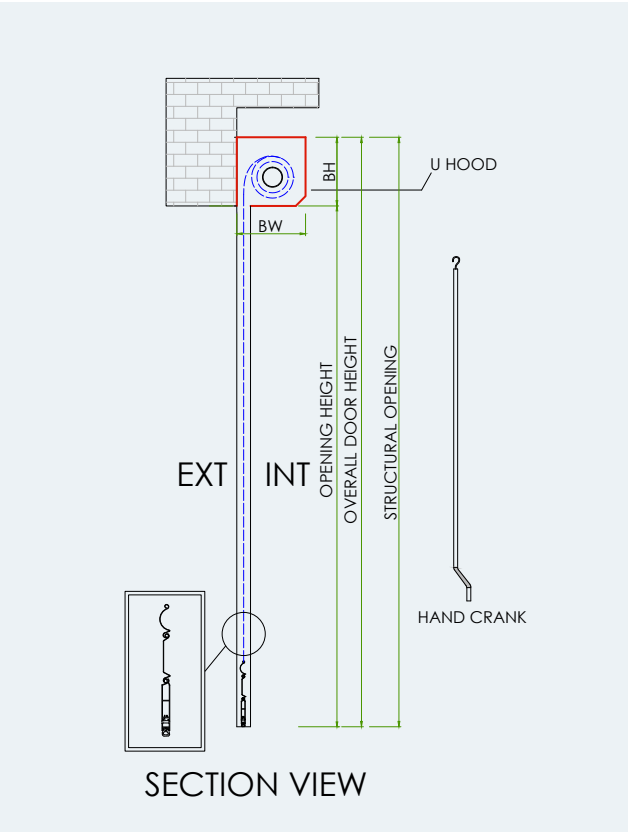
Tubular motors are placed in the shaft tube. The loss of space is less than side motors. The motor head is narrower than the side motor itself. Manual override system of the motor is intuitive for the end-user, with handle crank the door can be operated easily. Besides, these motors can be operated with the doors not more than 350 kgs or 30 sqm. These are not convenient for frequent usage.

- Wide range of torque – from 150 nm up to 330 nm
- Narrow motor head for minimum space requirement for motor
- Manual operation is possible during power failures
- Not suitable for frequent usage.



FACE OF WALL INSTALLATION

BETWEEN JAMB INSTALLATION



BW	Bracket Width
BH	Bracket Height

MPW	Motor Plate Width
MPH	Motor Plate Height

MW	Motor Width
B.W	Bearing Width
GW	Guide Width

SP	Steel Profile
CSW	Chain System Width



DRIVES SIDE MOTORS



Side motors are three phase direct drives with integrated safety catch devices characterised by compact design, wide range drive torque, easy installation & long periods of maintenance-free usage. The drive is fitted directly to the door shaft. These motors' safety brake is built into the gear. With complete serie, from 100 Nm up to 2000 Nm, these drives can lift doors up to 1.500 kgs.

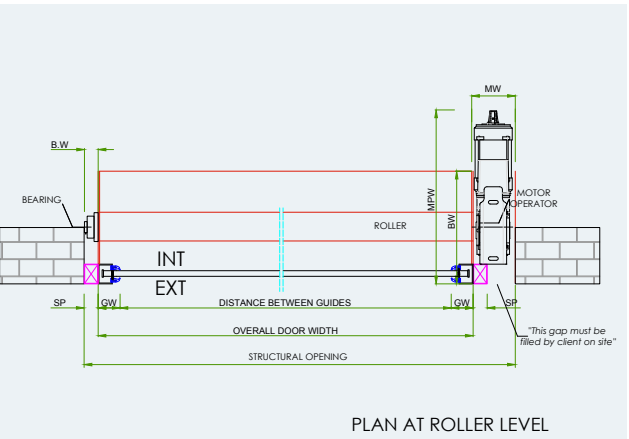
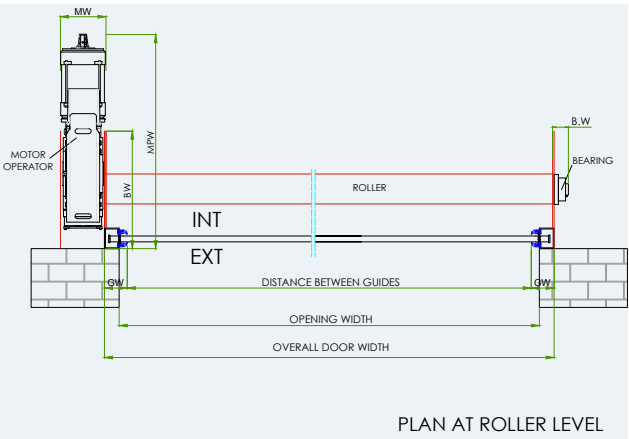
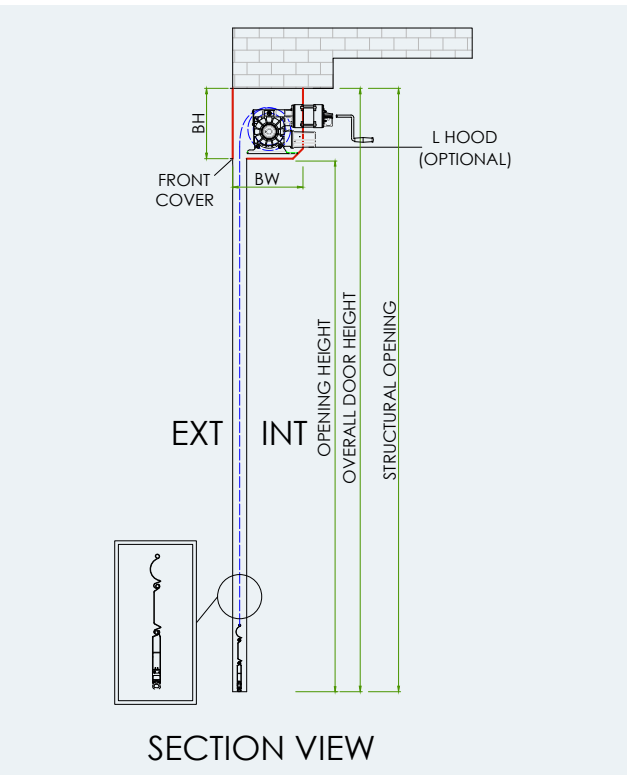
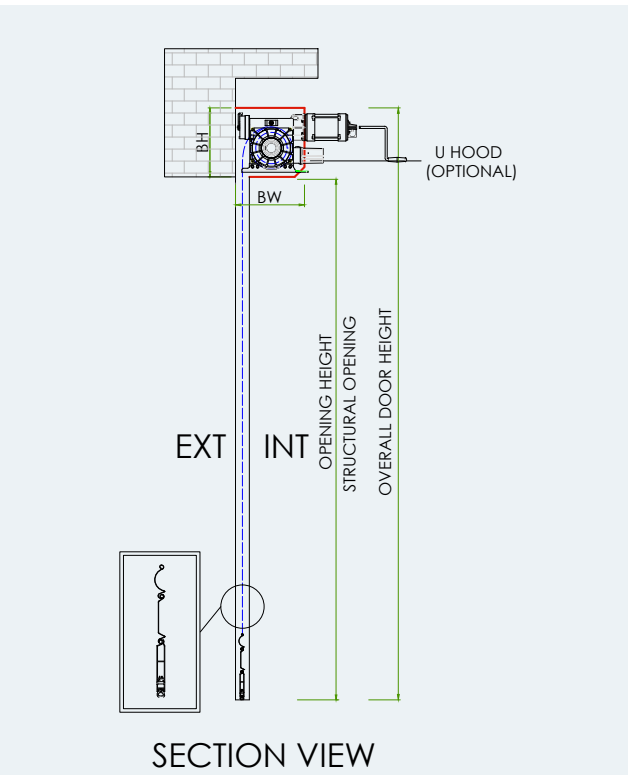
1. Extended delivery time and additional cost may apply
 2. Frequency converter increases the motor speed by adjusting individually output speed from 50 Hz to 87 Hz while reducing drive torque
 3. Please contact us about drive certificates and protection class documents, different brands and models may have different certifications

- Low maintenance
- Suitable for frequent cycles
- Wide range of drive torque
- Safety against failure integrated into the drive
- Thermal protection
- Manual operation: Hand crank for power failures
- Manual operation: Optional hand chain is available¹
- Custom versions, such as different voltages, frequencies and higher protection classes, are possible on request¹
- Optional frequency converter to increase the drive motor speed²
- Made in Germany
- Protection class varies from IP54 - IP65³



FACE OF WALL INSTALLATION

BETWEEN JAMB INSTALLATION



BW	Bracket Width
BH	Bracket Height

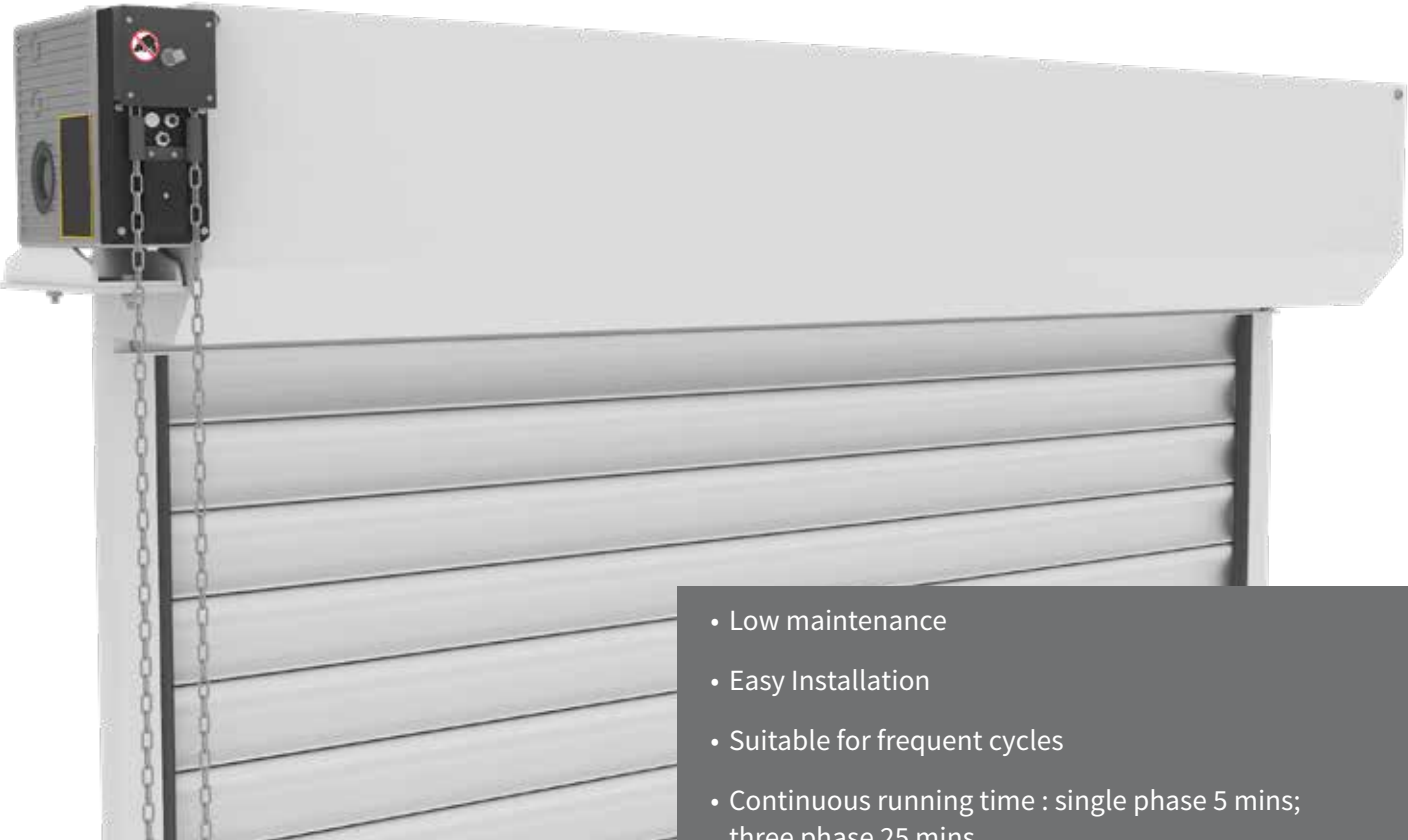
MPW	Motor Plate Width
MPH	Motor Plate Height

MW	Motor Width
B.W	Bearing Width
GW	Guide Width

SP	Steel Profile
CSW	Chain System Width



DRIVES BOX MOTORS



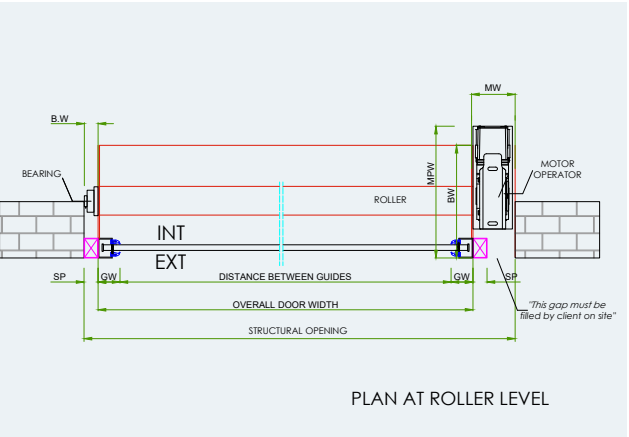
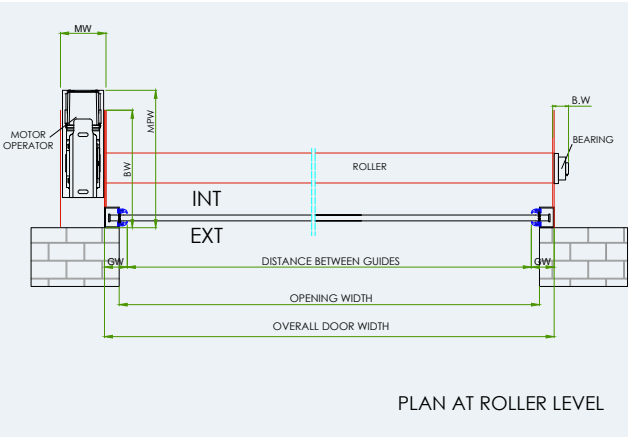
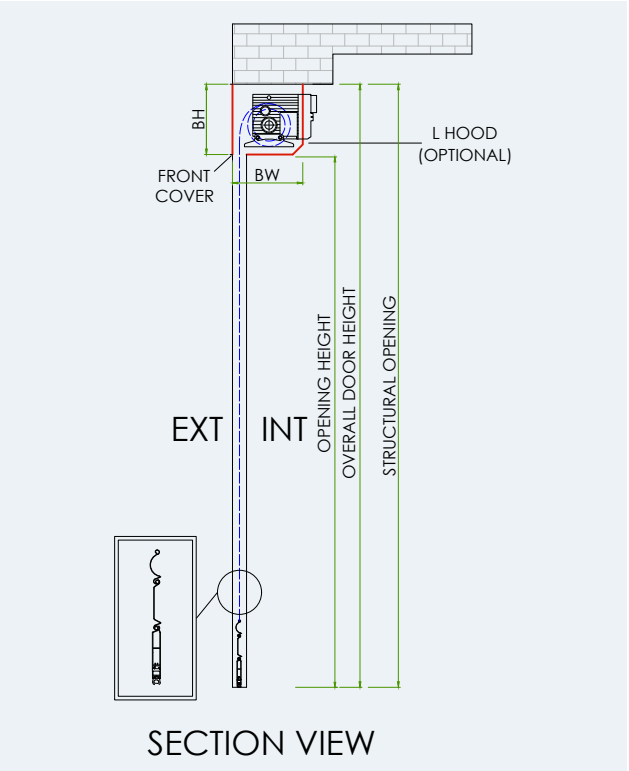
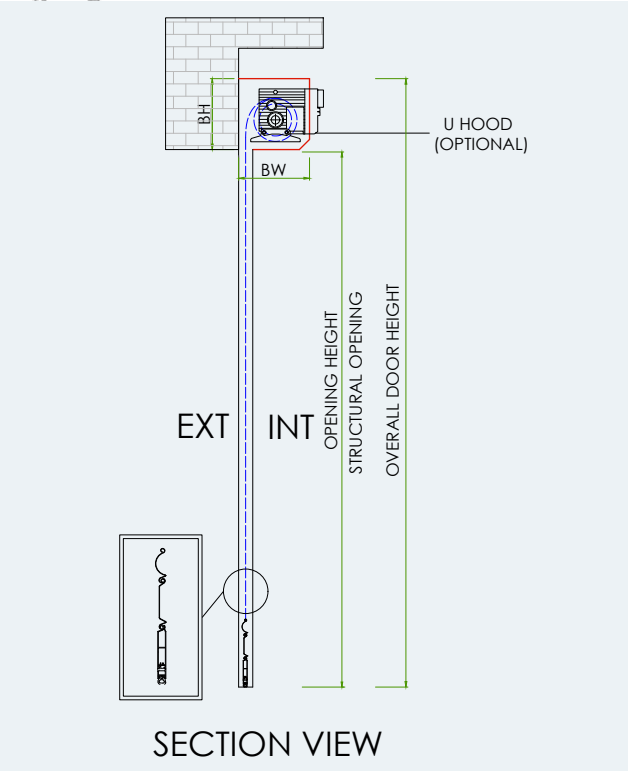
- Low maintenance
- Easy Installation
- Suitable for frequent cycles
- Continuous running time : single phase 5 mins; three phase 25 mins
- 400 NM of drive torque
- Integral test buttons
- Progressive limit switches with security limit switch
- Lubricated bearings and gearbox for life-time service
- Integral thermal protection
- Integral electromagnetic brake
- Manual operation: Hand chain for power failures
- Product of Somfy
- Protection class IP45

Box motor is a side motor with few differences. Like other direct drives, box motors with integrated safety catch devices characterised by compact design, wide range drive torque, easy installation & long periods of maintenance-free usage. The drive is fitted directly to the door shaft. These motors' safety brake is built into the gear. With 400 nm torque, these drives can lift doors up to 600 kgs. One main advantage compare to other side motors is this motor is very compact and the dimensions can match with the dimensions of the brackets.



FACE OF WALL INSTALLATION

BETWEEN JAMB INSTALLATION



BW	Bracket Width
BH	Bracket Height

MPW	Motor Plate Width
MPH	Motor Plate Height

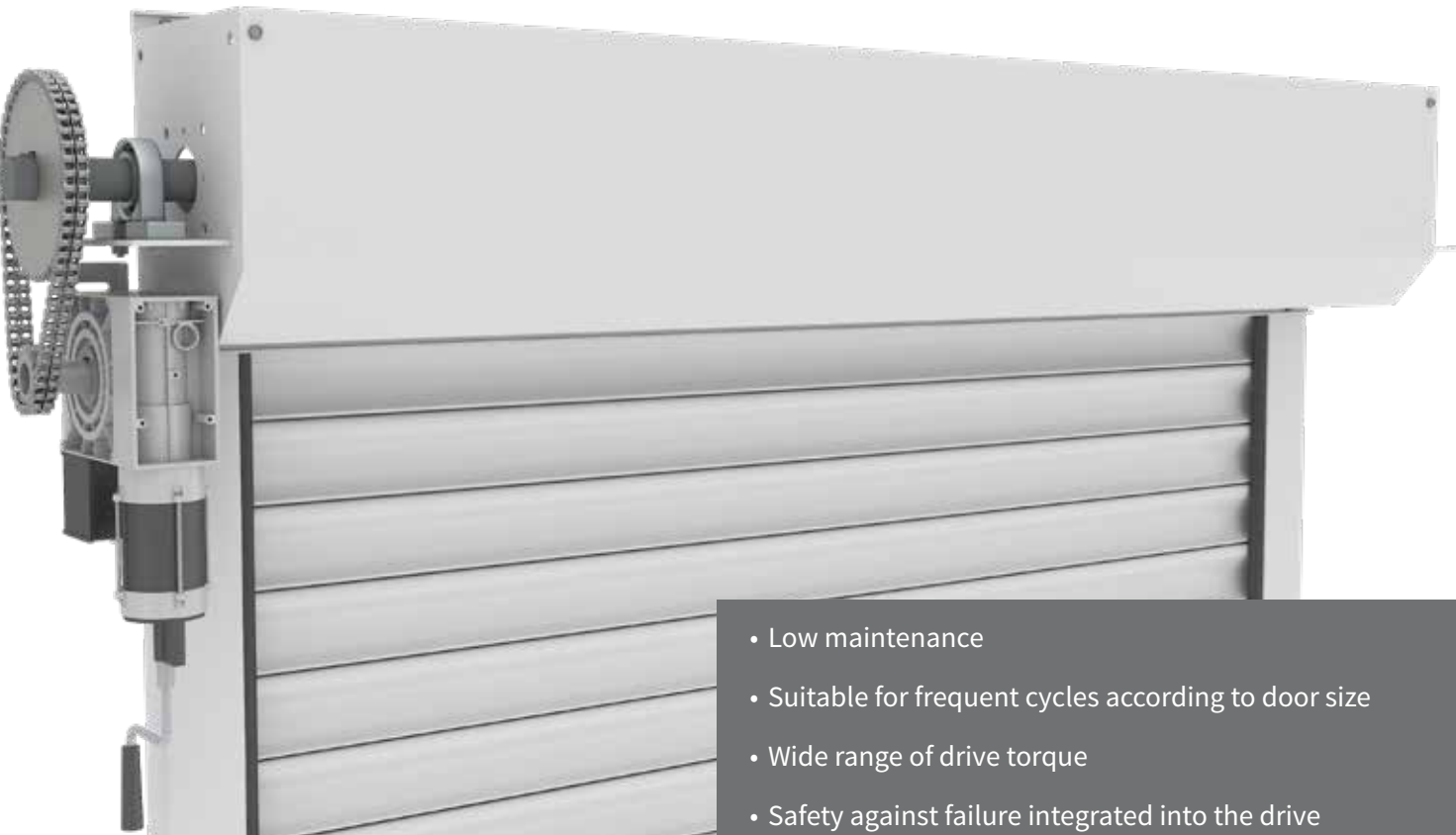
MW	Motor Width
B.W	Bearing Width
GW	Guide Width

SP	Steel Profile
CSW	Chain System Width



DRIVES

CHAIN DRIVES FOR EXTREME DIMENSIONS



- Low maintenance
- Suitable for frequent cycles according to door size
- Wide range of drive torque
- Safety against failure integrated into the drive
- Thermal protection
- Manual operation: Hand crank for power failures
- Manual operation: Optional hand chain is available
- Custom versions, such as different voltages and frequencies and higher protection classes, are possible on request¹
- Made in Germany
- Protection class varies from IP54 - IP65²

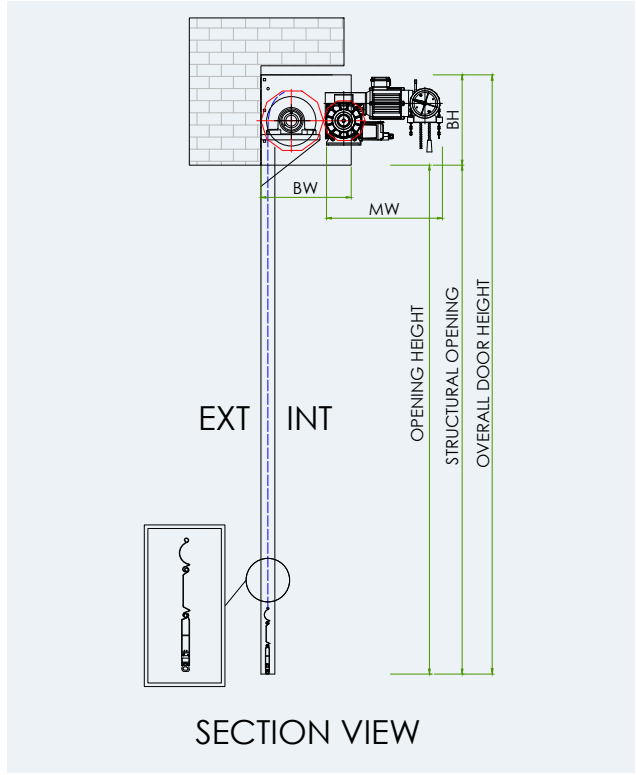
Diameter of the tube determined by the calculation is made according to the width and weight of the shutter in order to ensure correct deflection. Directive EN 10220 allows maximum flexion of 1/500, this means with a 5.000 mm wide shutter deflection (maximum bending point measured) of the tube must be 10mm (1/500) or 12.5 mm (1/400). Preparing shaft pipe with this rule improves the life of roller shutter and the drive. Produced with CNC lathes hexagonal design axles with flanges perfectly match with pipe.

1. Extended delivery time and additional cost may apply
2. Please contact us about drive certificates and protection class documents, different brands and models may have different certifications

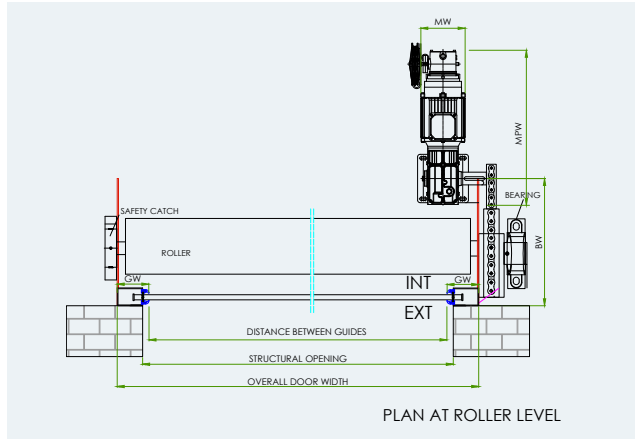
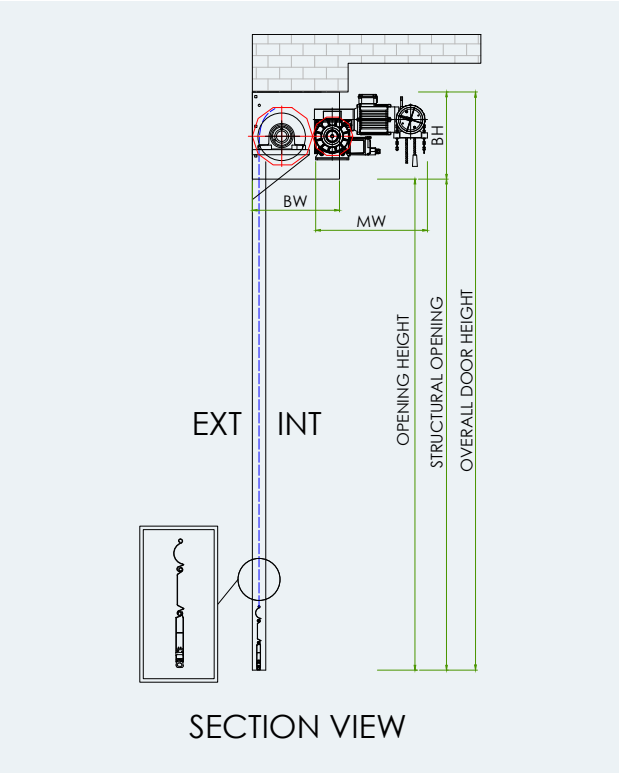


Safety Brake Devices for Chain Drives
As safety brake is not integrated into the drive, external safety brake must be used to prevent falling back of the door. In order to select appropriate safety brake device the diameter of the shaft, curtain weight and drive specifications needed. After correct calculations to choose right safety brake device for related drive, because these devices are also maintenance-free, firstly the protection of end-user than the door is ensured.

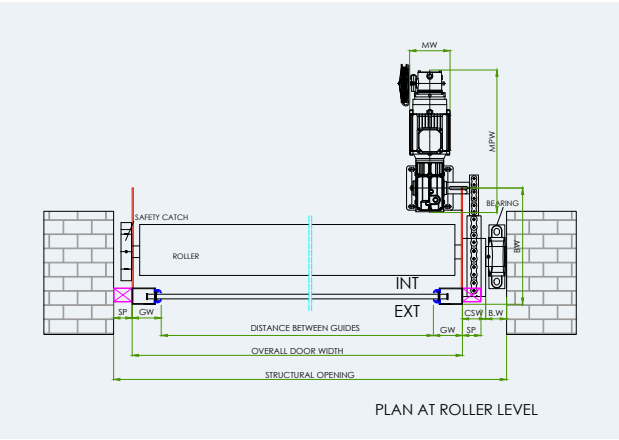
FACE OF WALL INSTALLATION



BETWEEN JAMB INSTALLATION



BW	Bracket Width	MPW	Motor Plate Width
BH	Bracket Height	MPH	Motor Plate Height



MW	Motor Width	SP	Steel Profile
B.W	Bearing Width	CSW	Chain System Width
GW	Guide Width		



DRIVES

CHAIN DRIVES



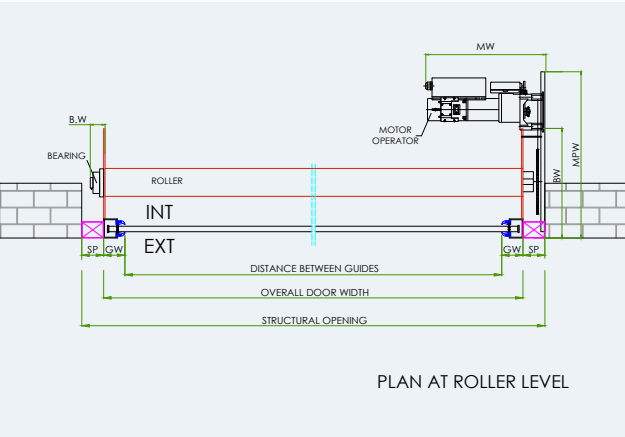
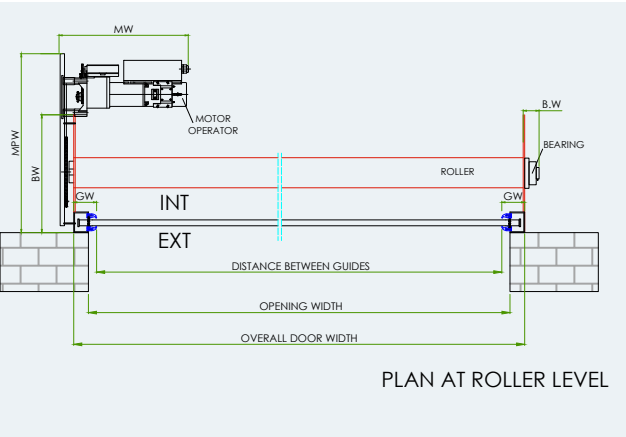
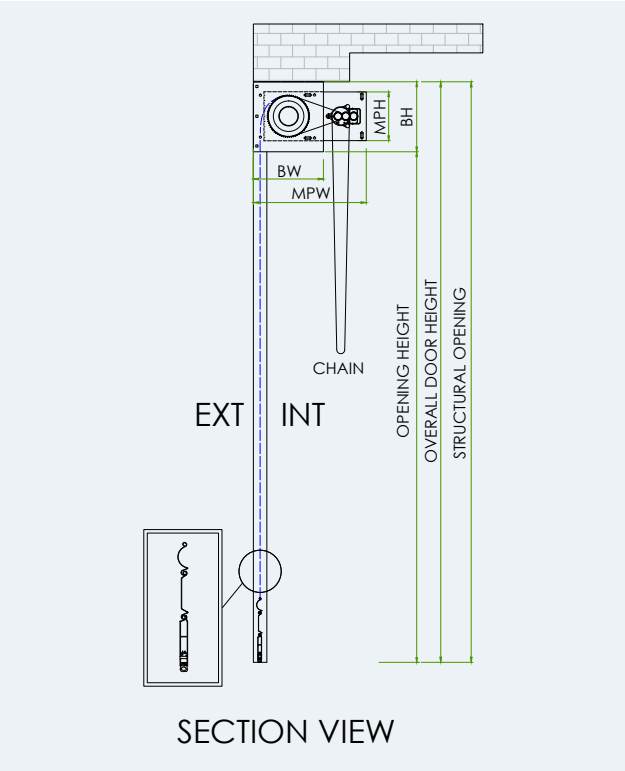
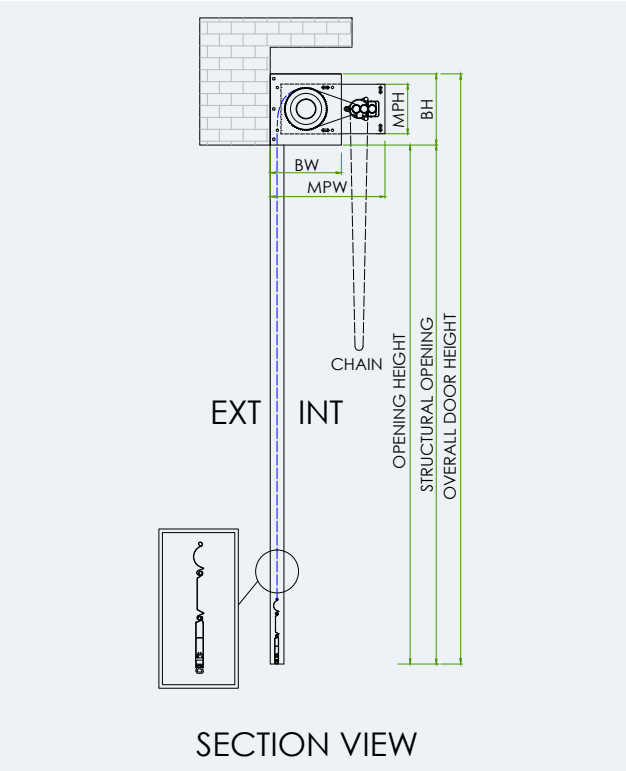
Chain drive single phase models are drives to be used with mid size roller shutters. The door shaft is driven by a chain-transmission. The main advantage of this motor is its cost effectiveness. Wide range of drive torques is available and these motors can lift up to 1.800 kgs. These drives are not suitable for frequent cycles because drive motor speed values are only for minimum cycles per day with slower opening and closing times. These motors can be combined with suitable safety catch device with integrated anti damping system. If external safety catch is not preferred, then there is a mechanical anti fall attachment on the chain transmission unit.

- Cost effective
- Single phase
- Wide range of drive torques
- Manual operation: Hand chain for power failures
- Less space requirement on the guide side
(Additional space needed on hood)



FACE OF WALL INSTALLATION

BETWEEN JAMB INSTALLATION



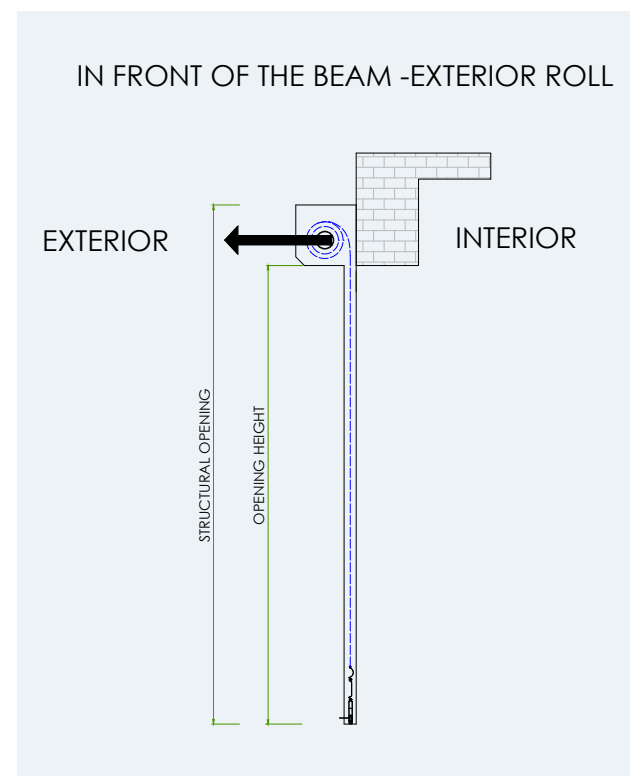
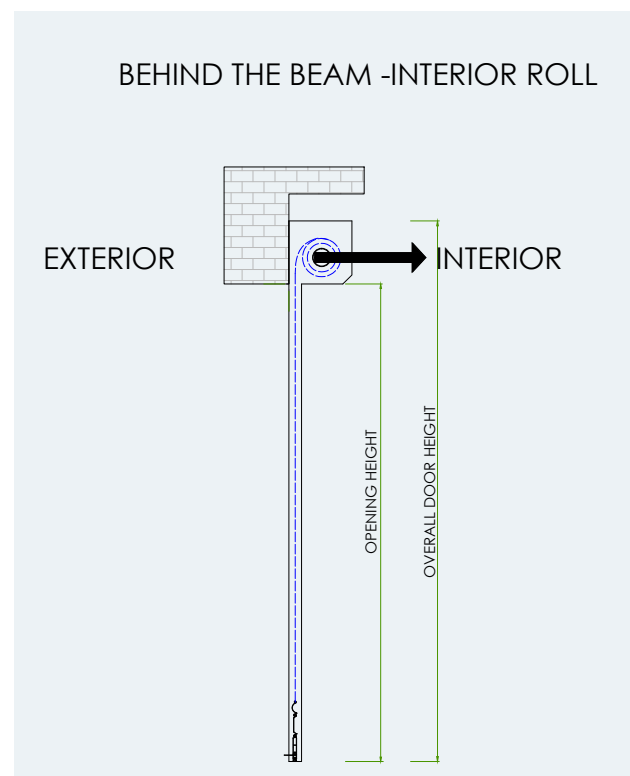
BW	Bracket Width	MPW	Motor Plate Width
BH	Bracket Height	MPH	Motor Plate Height

MW	Motor Width	SP	Steel Profile
B.W	Bearing Width	CSW	Chain System Width
GW	Guide Width		

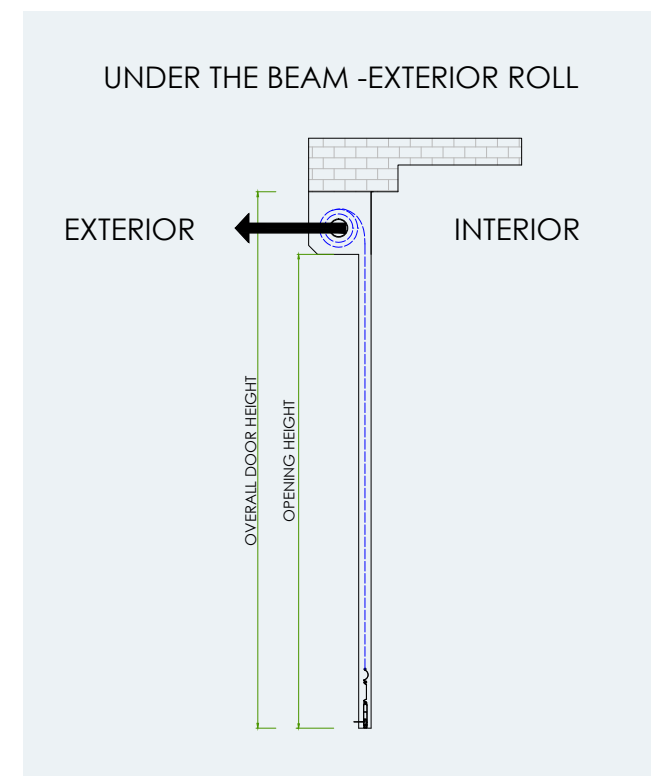
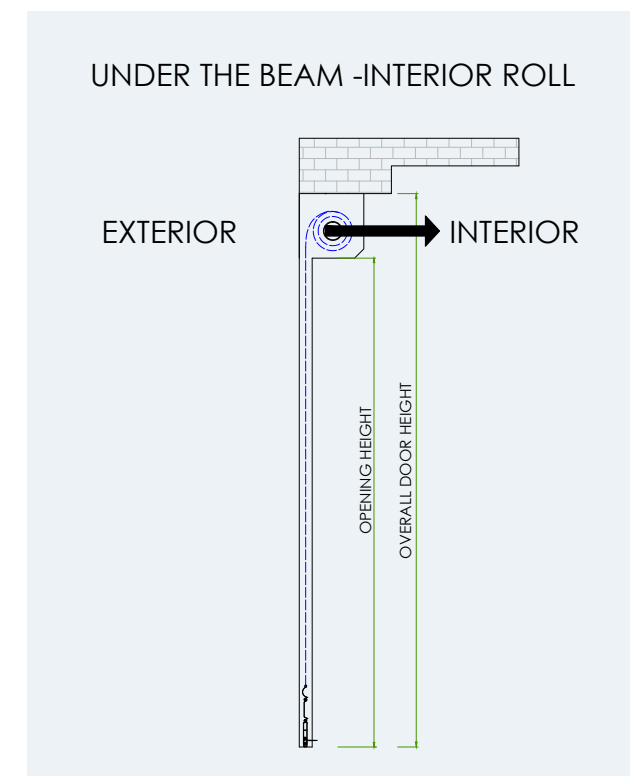


HOOD VARIATIONS

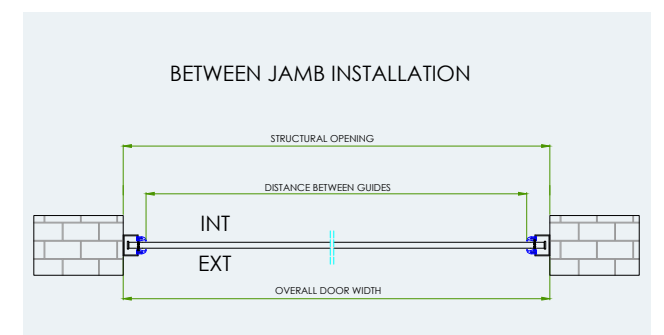
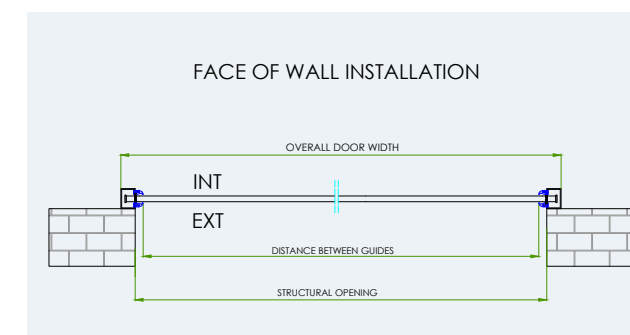
BEHIND / IN FRONT OF THE BEAM INSTALLATION

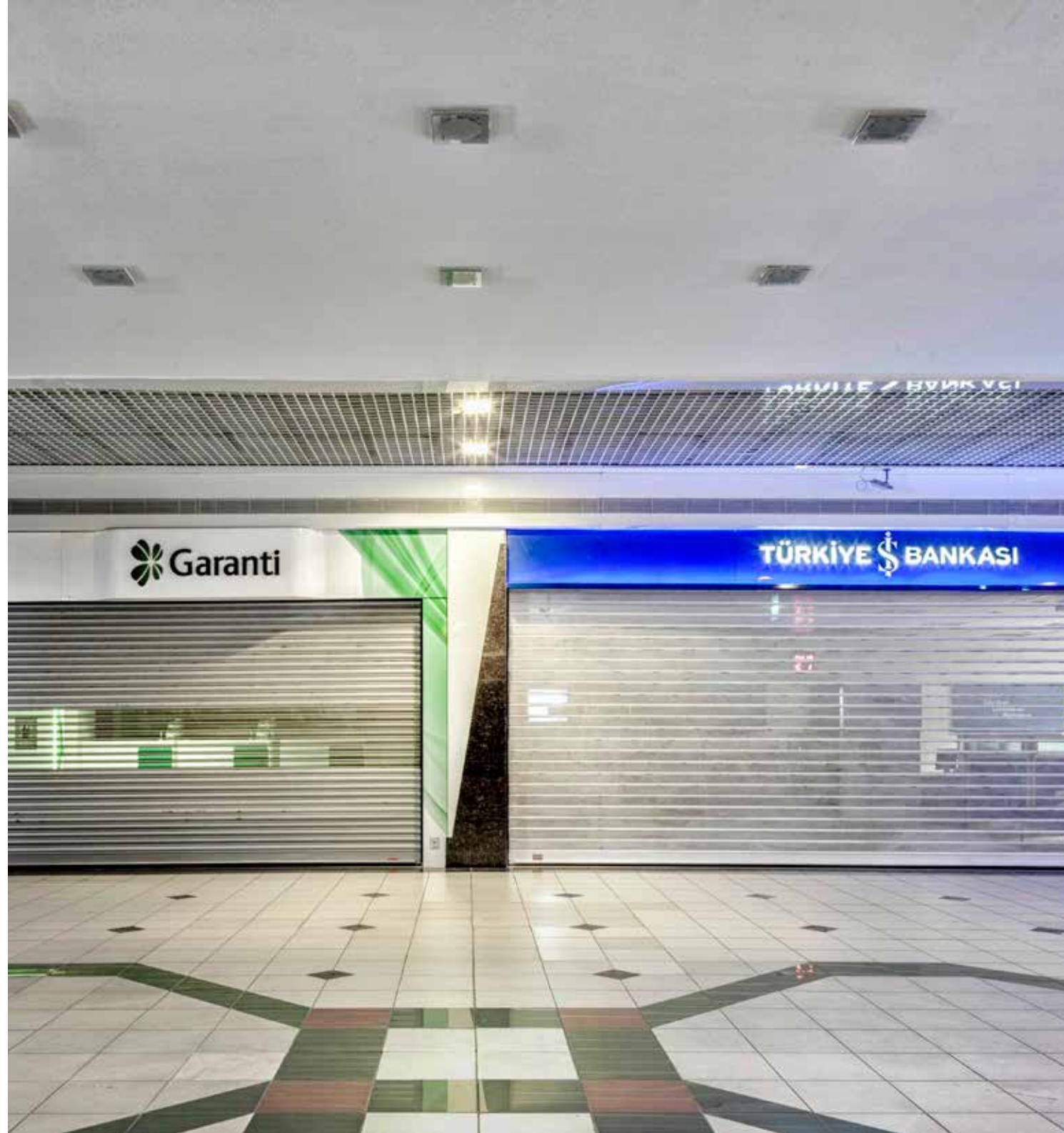


UNDER THE BEAM INSTALLATION



FACE OF WALL / BETWEEN JAMB INSTALLATIONS





ELECTRONICS

The drives and the control boards preferred with Insulated Pro Door Systems are suitable with wide possibilities of safety systems, sensors and access control systems to guarantee safety and protection for firstly users and then the door system. Special versions of safety systems or different kinds of automation scenarios are possible on request. Highly experienced electronics team can answer special requests if applicable.

- Experienced electronics team
- High quality materials
- Special requests possible
- Customized solutions are possible

RECOMMENDED SAFETY SYSTEMS



Safety Photocells

Safety photocell is a device which uses infrared light to function as a transmitter and receiver. Transmitter and receiver are placed facing each other at the opposite sides so that they see each other, and when the line of sight is interrupted by an obstacle, an alert is produced. Both with connection cable or wireless connection options are possible. Mounted outside or inside, close to rails. Extreme weather conditions (rain, fog, etc.) may reduce the range of photocells.



Light Curtain

The operation with light curtain which consists of a transmitter and a receiver is the most liable solution for rolling doors. It is also possible to install inside guides. Light curtain ensures the necessary safety. Especially with higher speed doors, light curtain integrates better with closing speed. Light curtain is extremely sensitive and integrates better with higher drive motor speeds.

CONTROL OPTIONS



Transmitter

2 and 4 channel 433 MHz transmitters with rolling code are available.



Push Button

Push button operates the opening and closing of the rollers shutter via command buttons. Emergency stop button can be added. Push buttons command button capacity can be raised to add the emergency stop or additional buttons for required operating commands. 2 buttons or 3 buttons with/without emergency stop versions are available.



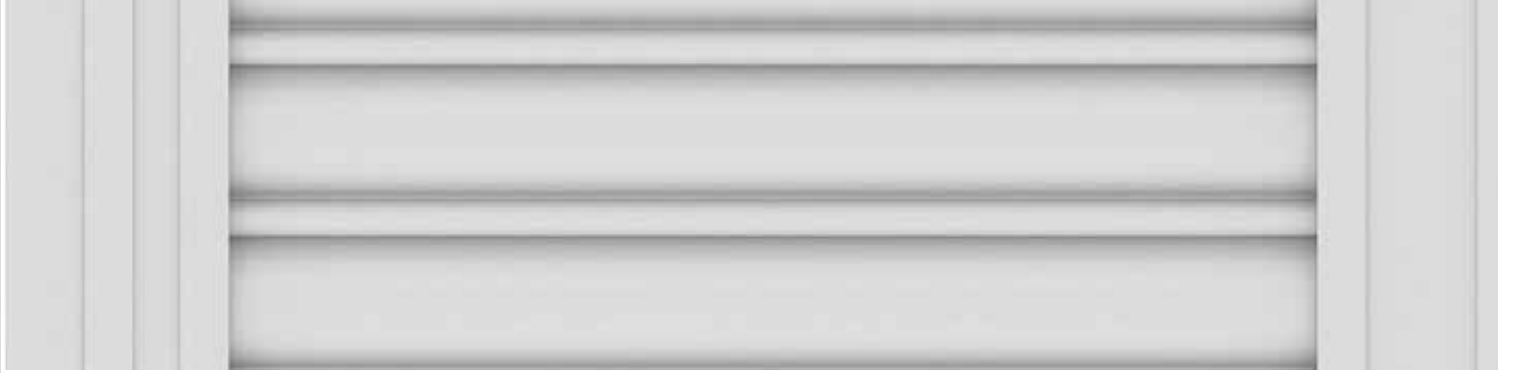
Key Switch

Key switches provide a secure, safe and easy method of door operation for authorised users by inserting and turning the key. Surface mounted and flush mounted versions are available.

Special requests of different control options are possible regarding the scenario that customer would like to realize.



PERSONAL ENTRANCE DOOR

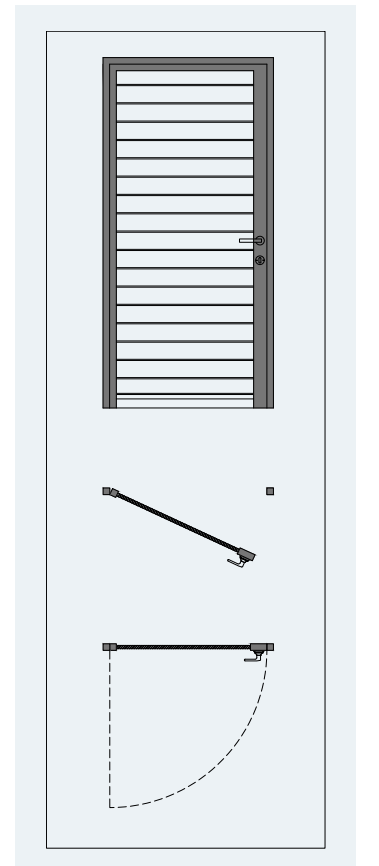
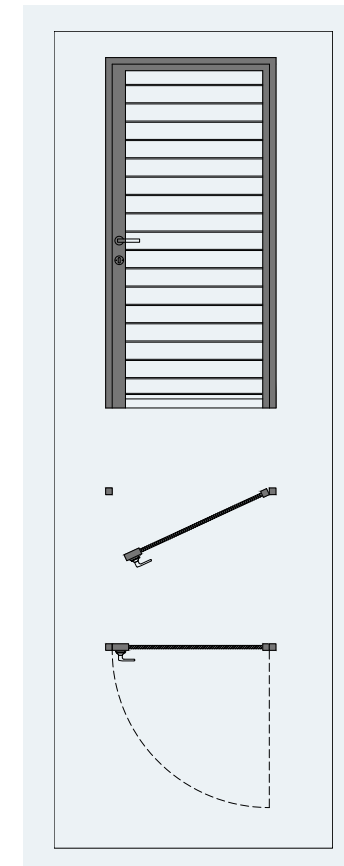


**Personal Entrance Door with
KP80 Profiles**



**Personal Entrance Door with
KP95 Profiles**

For easy access for personnel without needing to put the roller shutter up. , Personnel door is made with related profiles and must be fixed to side section. These doors can open inwards or outwards as desired and hinged left or right. All personal doors come with a lock and handle. Panic hardware is possible by request.





FROM START TO FINISH
ALL PROCESS HANDLED BY KEYPENK



Shutter Size:
L: 17.410 mm H: 4.200 mm



Shutter Size:
L: 14.270 mm H: 6.000 mm

**Keypenk Otomatik Kapı ve
Kepen Sistemleri Metal Plastik
San. ve Tic. A.Ş.**

Bağlar Mah. Yalçın Koreş Cad. No: 6/B
34209 Güneşli - İstanbul - Turkey
Tax Office No: Güneşli 6160014361
Phone +90 212 444 14 35
Email: sales@keypenk.com

  /keypenkofficial

  /keypenk

www.keypenk.com

