

**WHERE SAFETY, SECURITY, QUALITY AND  
ELEGANCE JOIN HANDS TOGETHER**

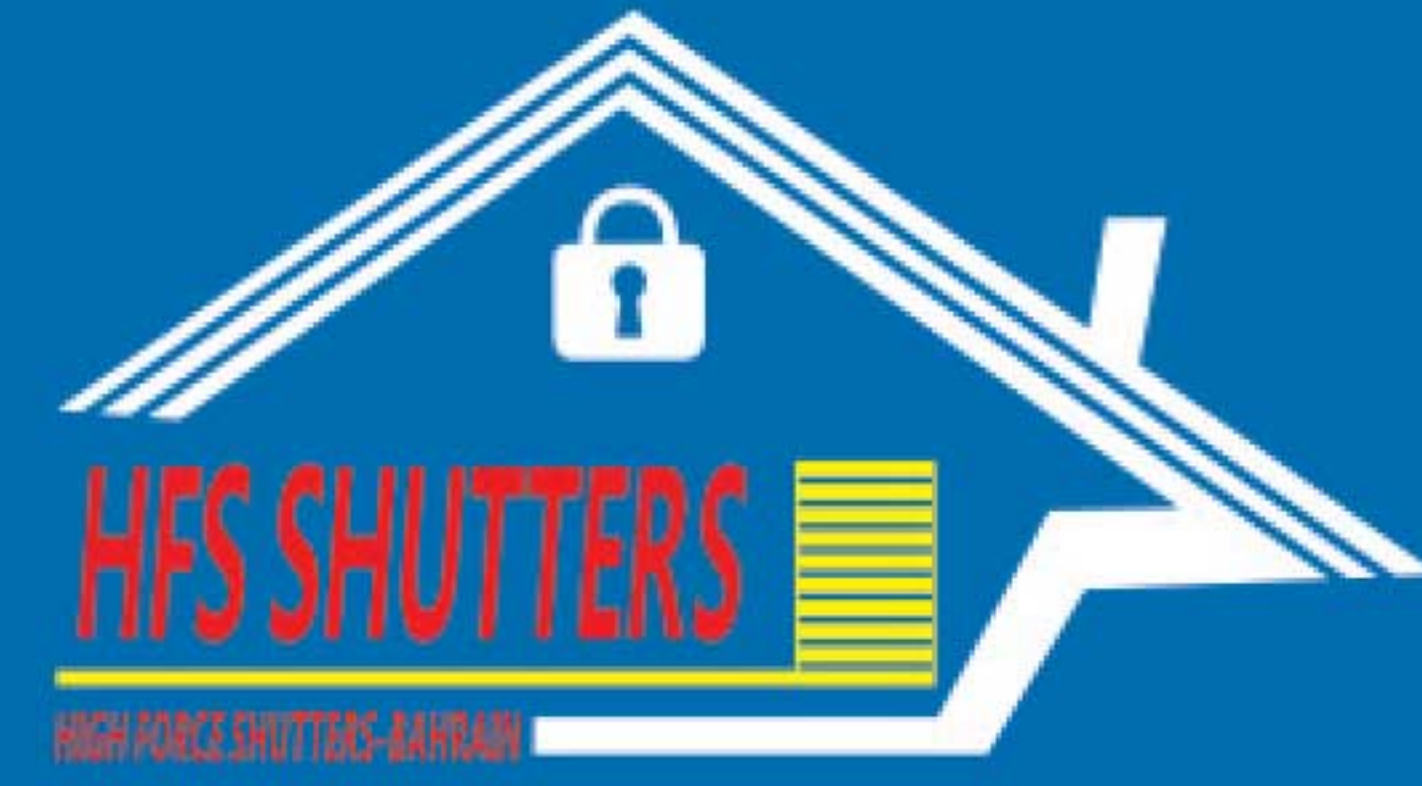
*Focus on roller shutters 15 years*



**Fluid Tech**

Trading Est  
For Hydraulics, Pneumatics & Mechanical Solutions

**WHERE SAFETY, SECURITY, QUALITY  
AND ELEGANCE JOIN HANDS  
TOGETHER**



Flow chart of “HFS”-High Force European Style Rolling  
Shutter’s Production, Marketing Techniques and Strategies  
Raw material a00 Aluminum Ingots+Si,Mg  
Smelting  
Aluminum Rods  
Extruding  
Aluminum Alloy Sections  
Ageing (heat treatment), Strengthen the Resistance  
Punching Holes (Sheets Piercing)  
Electrostatic Painting (Coating) or Oxidation  
Finished Aluminum Sections  
Cut to the Exact Sizes  
Materials Packing  
Readymade Door Assembly  
Shipping  
Destination Inspection  
Installation, Commissioning and after – Sales Services

## Our Company’s Quality Strategy

- A Satisfied Customer is our Long Term Investment.
- Strengthening the R&D, to improve the Quality of our Products
- Continual Improvements to meet the Customer’s Satisfaction.



# **Brief Introduction**

Fluidtech Trading Est is an ISO Certified Company, based in Kingdom of Bahrain. Established in year 2002 with 3 employees and now we are 44 employees with the turnover more than BHD. One million.

## **Our expertise is as follows:**

- Complete Solution Providers in Hydraulics Supplies and Services.
- Complete Solution Providers in Pneumatics Supplies and Services
- Transport and Mobile Hydraulics.
- Material Handling Equipments.
- Fabrication of Truck Bodies , Water Tanks, Sewerage Tanks, Diesel Tanks, Recovery Vehicles, Dump Trucks , High Pressure Jetting Units etc...
- Supply and installation of Truck Mounted Cranes, Overhead Cranes, Tail Lifts, Wheel Chair Lift, Skip Loaders etc...
- Complete Machining, Fabrication, Painting Facility.
- Mobile Hose Vans for the On Site Services.
- Extra Low Voltage Solutions, Passenger Lift, Commercial Lift, Vehicle Tracking Systems, Access Controls, Reverse and Parking Camera Installations etc...
- Electrical and PLC Trouble Shooting.

Apart from the above, we have started the Rolling Shutters Supply, Installation and Commissioning with the special and dedicated team, having experience in this island for more than 15 years.

We have our Own Brand **HIGH FORCE SHUTTERS (HFS)** in Bahrain, with proven track record across the Middle East, operating in different names but manufactured by a Parent Company.

## **Why Fluidtech?**

We are committed to serve our customers

- ★ 24X 7, Sales and Service Supports.
- ★ Dedicated Team with full expertise.
- ★ Comprehensive Solution Providers like Rolling Shutters, Overhead Shutters, Sliding Gates, Swinging Gates, Traffic Barriers, and Access Controls etc...
- ★ Commitment, Competent and Job Completion in a timely manner.
- ★ High Quality Products with Competitive Prices.
- ★ In Fluidtech , Quality doesn't mean to pay more.



## Specified aluminum alloy sections for Electrically Operated Remote Control Rolling Shutters

### Chemical Composition

Si	Mg	Cu	Fe	Mn	Zn	Cr
0.4-0.6	0.6-1.0	0.4	0.5	0.3	0.3	0.2

### Mechanical Property

Tensile Strength	$\geq 200\text{N/mm}$
Percentage of Elongation	$\geq 6\%$
Webster Hardness	$\geq 10\text{HW}$



### Specifications of Coating

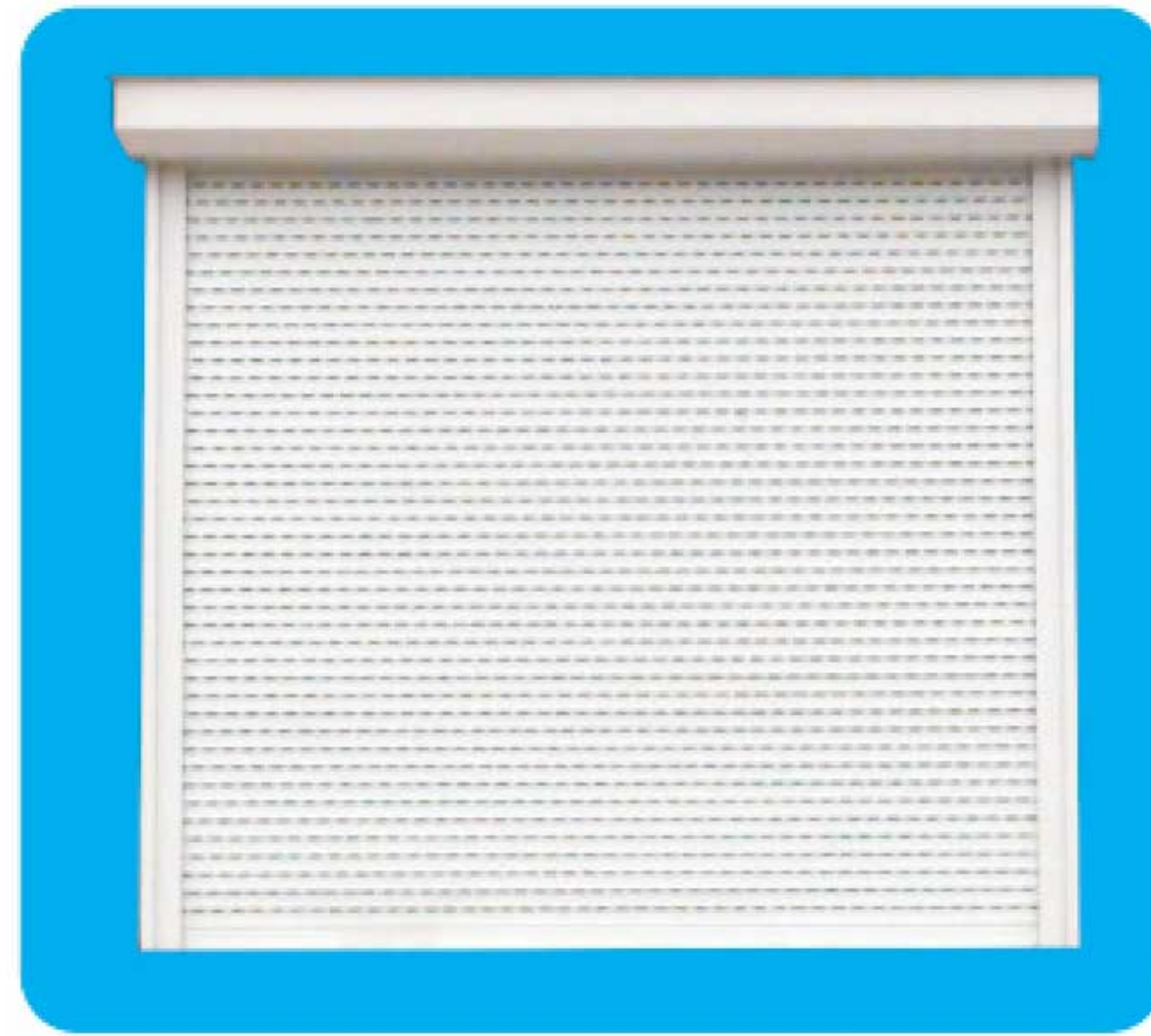
Thickness of Coating	Maximum Local Thickness 80um Minimum Local Thickness 40um
Luster	$60^{\circ} \pm 7^{\circ}$
Acid Resistance	No blister or other obvious changes by visual inspection after a Hydrochloric Acid Test
Solvent resistance	No softening or other obvious changes on the surface of the coating after a Dimethylbenzene Test
Dent Resistance	After the Cross Cut Test, the coating and the adhesive remain in the same level, no deviations observed.
Bending Resistance	No cracks or peeling off after a bending test with the 3mm radius of curvature and $180^{\circ}$ Bend Angel
Adhesive Force	After the Cross Cut Test, the coating and the adhesive remain in the same level, no deviations observed.

Rolling shutters interior & exterior impressions

Sun shading, Durable, Pleasant Atmosphere, Automatic Opening and Closing



Complete closed



Air permeability



Complete open



Half closed



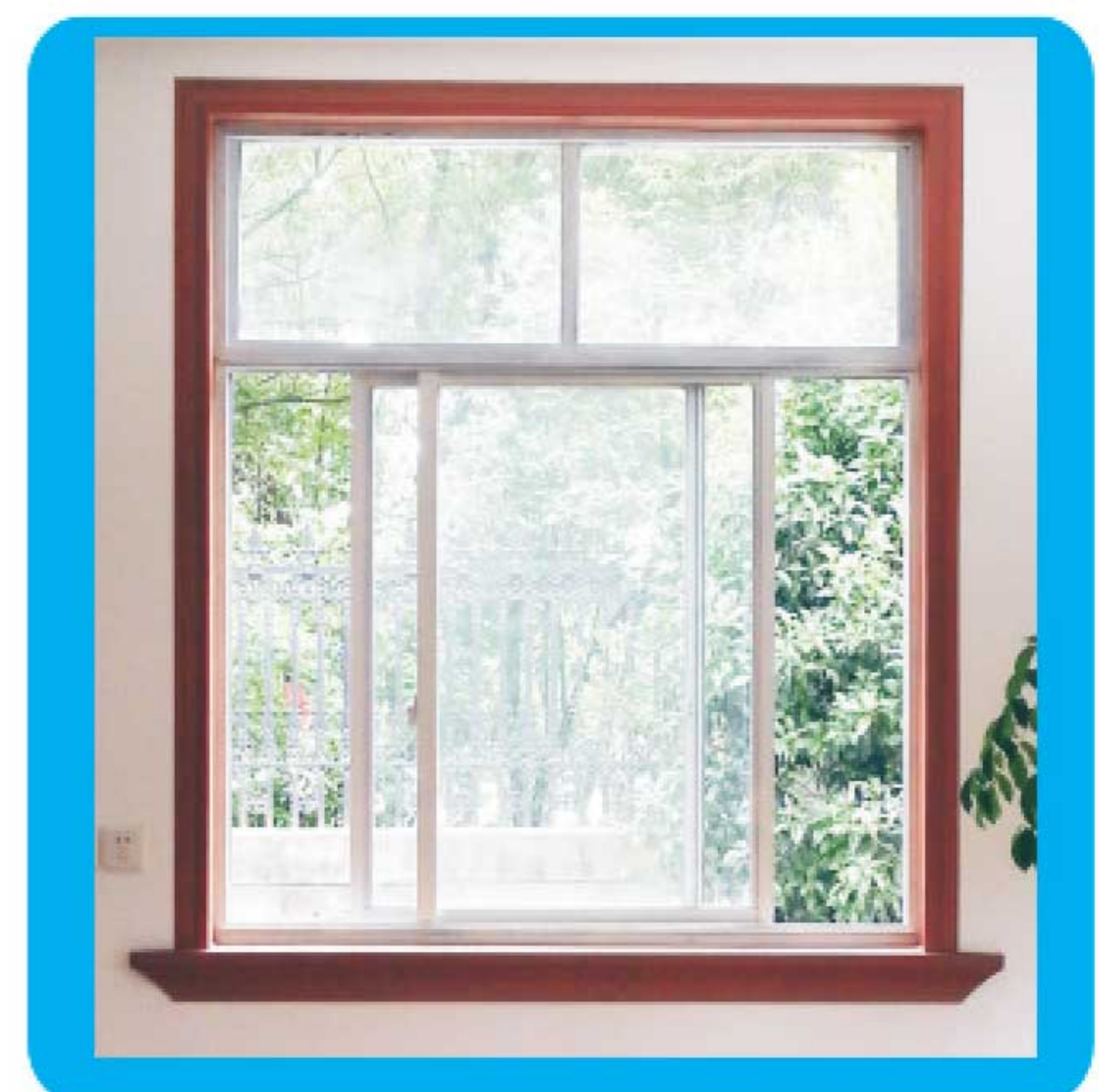
Half open



Half closed



Air permeability



Complete open inhouse view

### **HFS - 33**

HFS-33 Double Layer Aluminium Alloy Shutter Sheet has small holes of 30mm x 5mm at the hook, the space between the holes is 15mm. It is an improved product of 37 and 47, with the increased single hole size and decreased gap between the two holes. So it operates effectively in the day with bright sun shine and in the hot, humid conditions.

Maximum shutter size:  $\leq 3m$

Height:  $\leq 3m$



### **HFS-55F**

HFS-55F insulation slat made up of Aluminium 3003 with high quality painting in various colors with Polyurethane insulation materials filled inside. It is used as Sun Shades and to Maintain the room temperatures. Mainly used on window roller shutters and small doors, Max shutter width  $\leq 3m$



### **HFS-77F**

HFS-77F insulation slat, made up of Aluminium 3003 with high quality painting in various colors. Polyurethane insulation materials filled inside. It is used as Sun Shades and to Maintain the room temperatures. Mainly used on window roller shutters and small doors, Max shutter width  $\leq 5m$



### HFS-33AP

HFS-33AP Extrusion form slat, made up of Aluminium 6063 with high quality powder coating available in various colors with Polyurethane insulation materials filled inside. It is used as Sun Shades and to Maintain the room temperatures. Mainly used on window roller shutters and small doors, Max shutter width  $\leq 3m$



### HFS-55AP

HFS-55AP Extrusion form slat, made up of Aluminium 6063 with high quality powder coating available in various colors with Polyurethane insulation materials filled inside. It is used as Sun Shades and to Maintain the room temperatures. Mainly used on window roller shutters and small doors, Max shutter width  $\leq 5m$



### HFS-77AP

HFS-77AP Extrusion form slat: made of Aluminium 6063 with high quality powder coating available in various colors with Polyurethane insulation materials filled inside. It is used as Sun Shades and to Maintain the room temperatures. Mainly used on window roller shutters and small doors, Max shutter width  $\leq 6m$



## HFS-50

The unique graphic design of the surface profile and the hook keeps the roller shutter diameter to minimum and thus increases the effective height of the low rise garages.

Maximum shutter size:  $\leq 4\text{m}$

Height:  $\leq 4\text{m}$



## HFS-55A

HFS-55A double layer Aluminium alloy sheet has holes of 20mm x 2.3mm size at the hook, when it is not completely shut it enables day light and ventilation.

Maximum shutter size:  $\leq 4\text{m}$

Height:  $\leq 4\text{m}$

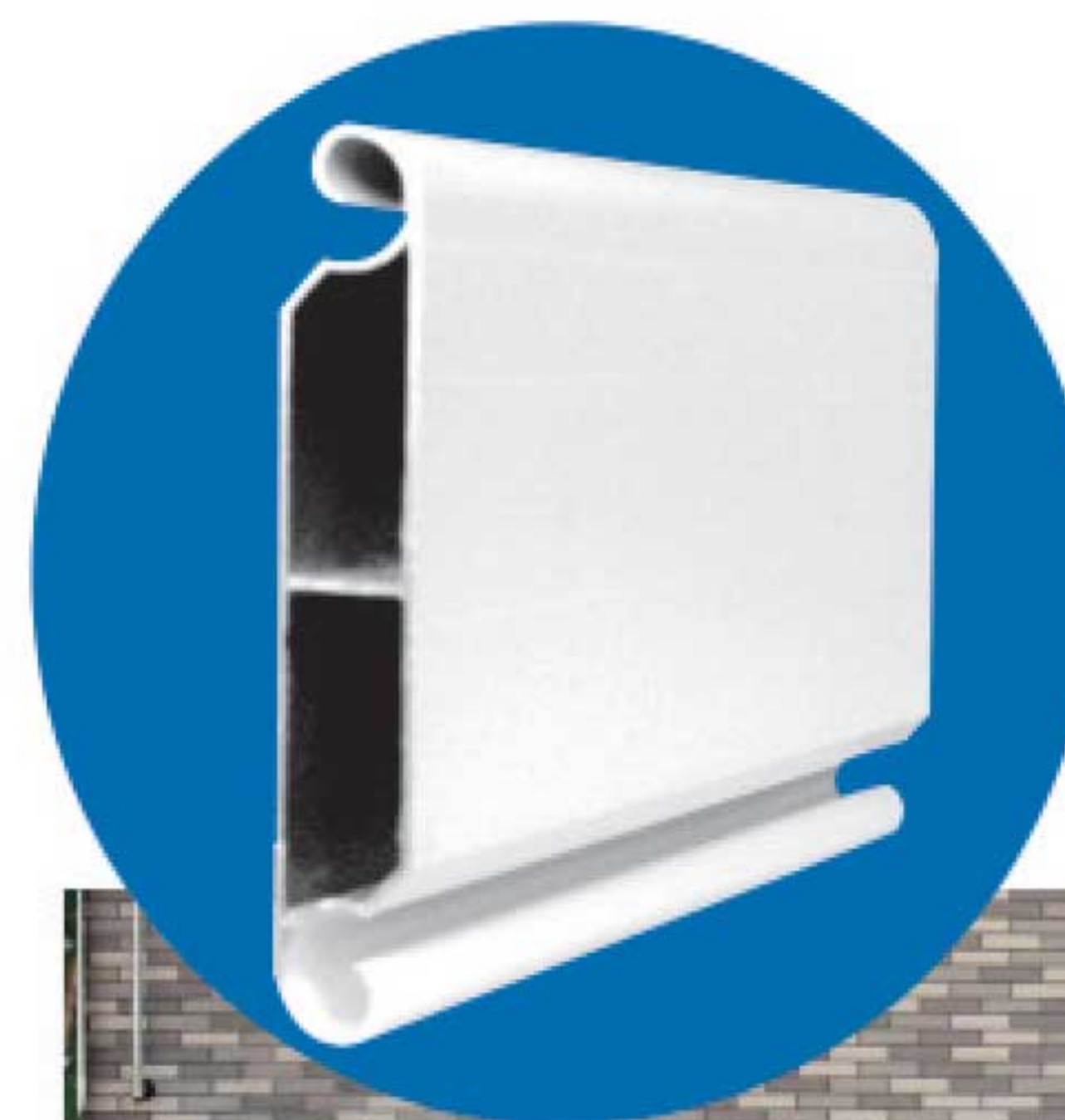


## HFS-65

The graphic design of the HFS-65 make it a privilege that it can be installed both inside and outside with a decent appearance, especially suited to some low rise garages for the sheets can be installed outside negatively.

Maximum shutter size:  $\leq 5\text{m}$

Height:  $\leq 5\text{m}$





### HFS-77A

The thickness between the two layer is 18mm, This type equipped with a specially designed sound elimination layer which enable the silent operation. This type is widely used in villa garage, stores and large scale factories and warehouses.

Maximum shutter size:  $\leq 5\text{m}$

Height:  $\leq 5\text{m}$



### HFS-77D

77D single layer Aluminium alloy sheet has a big hole of 100mm x 40mm on the front and the space between the holes is 50mm, There is a 50mm x 2.5mm size organic glass slot insertion on the back which enables the day lighting and act as a dust prevention. There is a specially designed sound elimination layer that helps silent operation. It can be used together with 77A type. Mainly used in banks and stores.

Maximum shutter size:  $\leq 5\text{m}$

Height:  $\leq 5\text{m}$

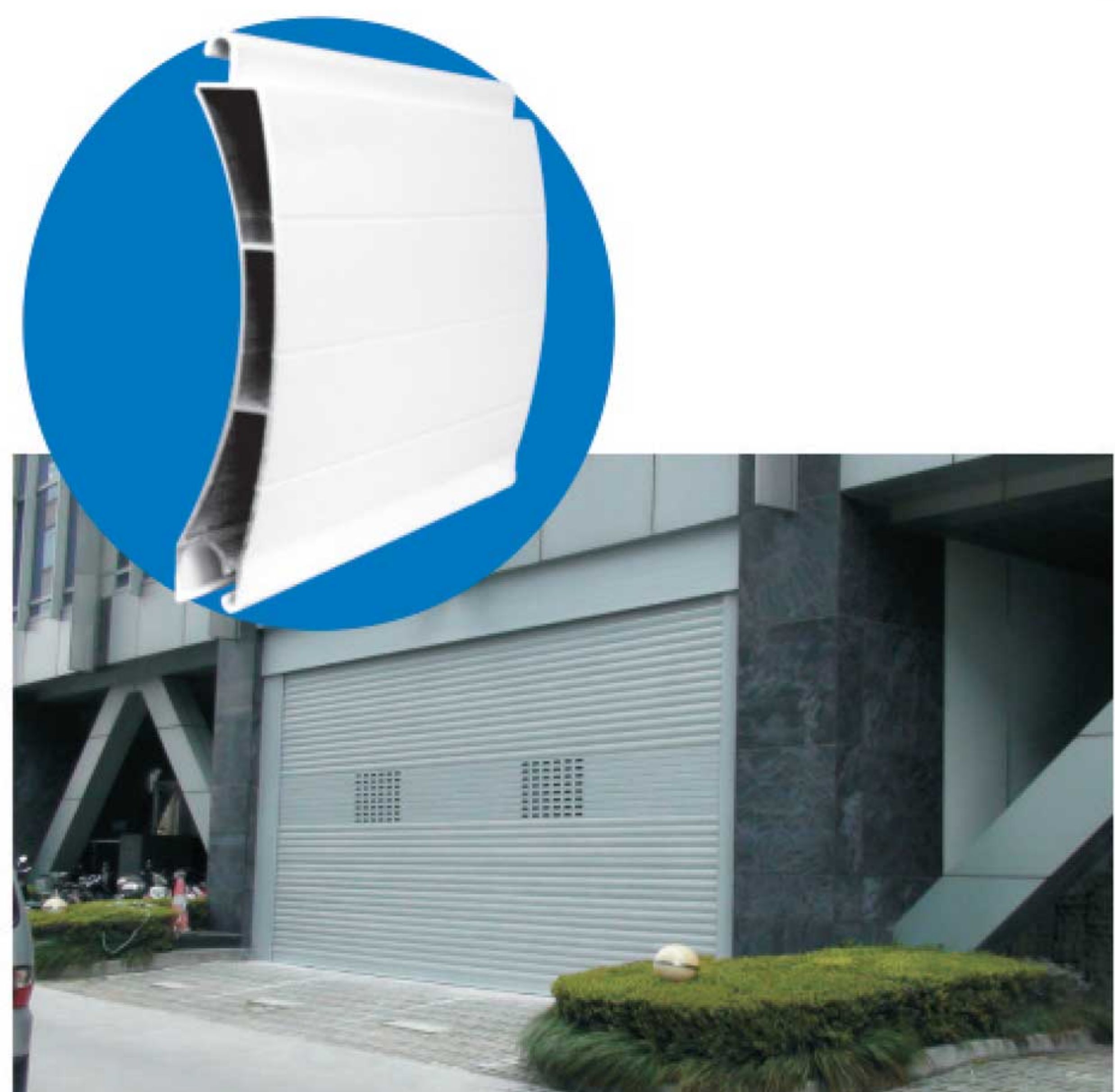


### HFS-100A

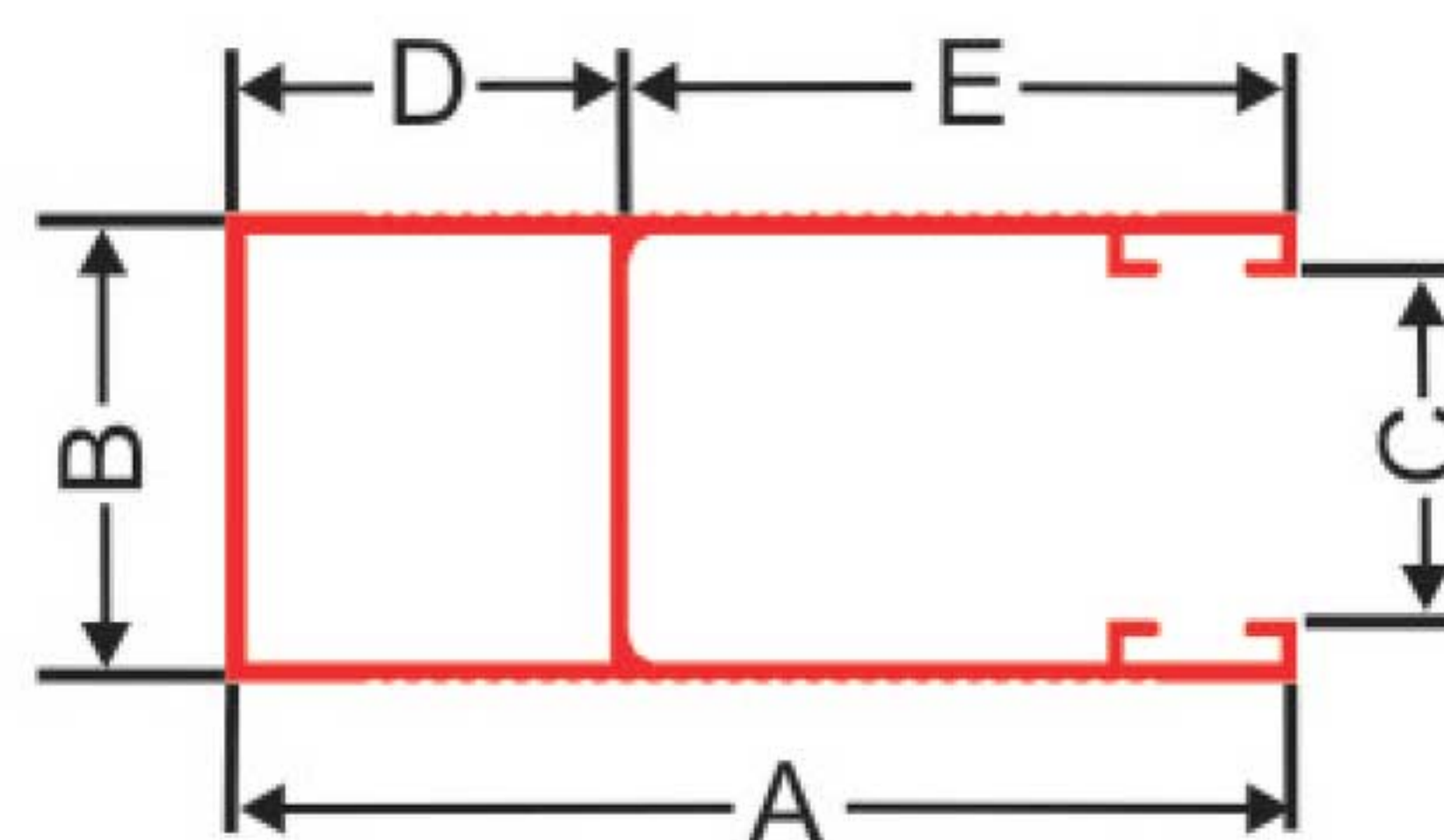
The double layer Aluminium alloy has a 22mm thickness between the two layers which effectively enhances the capacity of wind resistance, And a specially designed sound elimination layer that enables the silent operation of the shutters. This type is mainly used in large scale factories and warehouses.











Maximum shutter size:  $\leq 9\text{m}$

Height:  $\leq 7\text{m}$



Groove Parameter Form of Roller Shutter Matching



Pictures	Model	A	B	C	D	E	Thickness	Suited Shutter Slat Model
	105A	105	44	33	40	65	2.6	90G
	100B	100	38	28	35	65	2.4	100
	100A	100	34	25	30	70	2.0	77
	95A	95	34	25	45	50	1.6	77
	80B	80	34	25	30	50	1.6	77
	80A	80	28	19	25	55	1.6	65、55、50
	70A	70	28	19	30	40	1.6	65、55、50
	65N	65	25	13	26	39	1.3	49、42、39、37、33
	60S	60	22	13	26	34	1.2	49、42、39、37、33
	53A	53	22	13	26	27	1.1	49、42、39、37、33

Series of Mudsill



HLS95G



HLS85Q



HLS77B



HLS505D



HLS60A



HLS50A

Series of Mudsill



HLS55A



HLS55B



HLS40

Series of Top Beam



HLS77A



HLS55



HLS28



HLS25

Series of Multi-angle Pipe



HLS28D



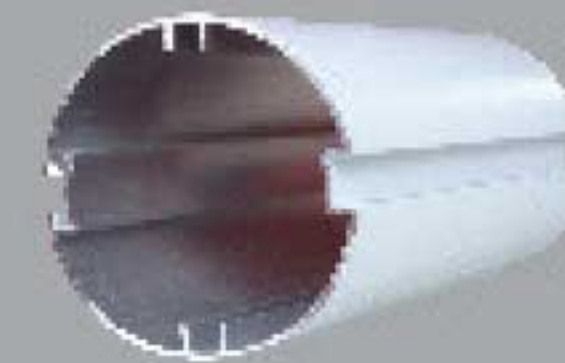
HLS30D



HLS38D



HLS40D



HLS55D\58D



HLS58Y



HLS60D

Series of Multi-angle Pipe



HLS63D



HLS68D



HLS85D\90D

Series of Wall Panel



HLS100



HLS85



HLS65



AM-s Standard Tubular Motors installed inside the rolling tube , can be opened and closed by stand by power during the power failure. It can also be removed from this channel on emergency conditions. Application in Intelligent Controls such as Anti theft shutters, doors and windows, garage doors, balcony doors, shop doors, sunroof, video screens, cloth shutters etc?.



AM-M Manual Tubular Motors can be hand cranked to open and close shutter during power failure. Application with intelligent controls, such as garage doors, shop doors, factory rolling shutter door and so on



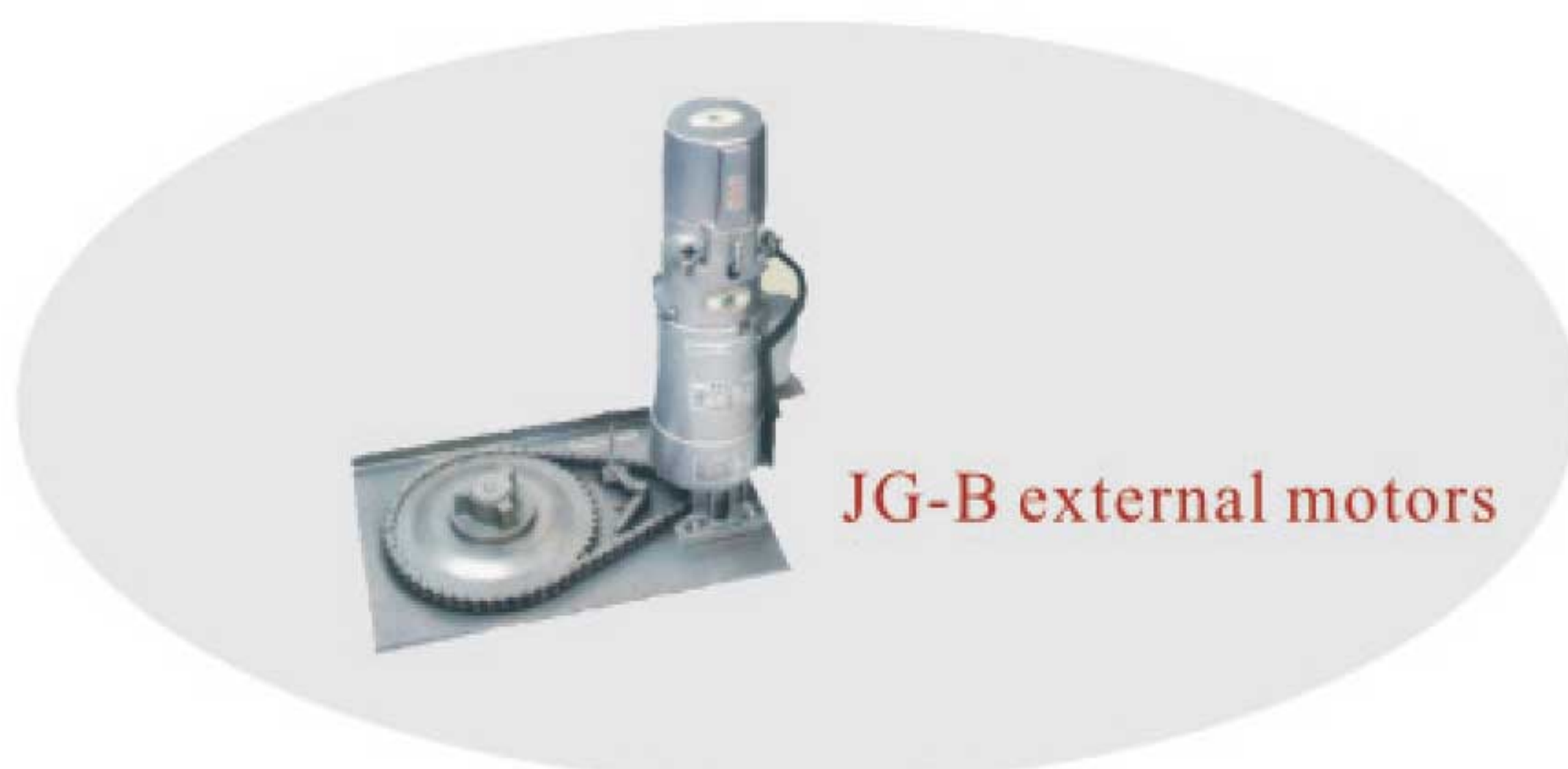
AM-S built in remote control tubular motor receiver installed in the motor tube just need to arrange 220V power supply to the installation location. During the power failure the roller shutter can be opened and closed through the standby power, it can also be removed from this channel on emergency conditions.



AM92-M manual tubular motors installed in the rolling tube it can be hand cranked to open and close the shutter during the power failure. Apply to more than 20 Square meter of rolling shutter doors



BT rolling clutch motors can be supported by pulling an emergency chain open and close shutters during the power failure, shutters up or down in the run time, the scroll rack driven outward or inward horizontally so that the shutter and guide notch always maintain the vertical, effectively reducing smaller rolling friction with the guide groove, thereby prolong the using life of the shutters and the guide groove, apply to the large scale industrial shutter doors with height  $\geq 3.5$  meters

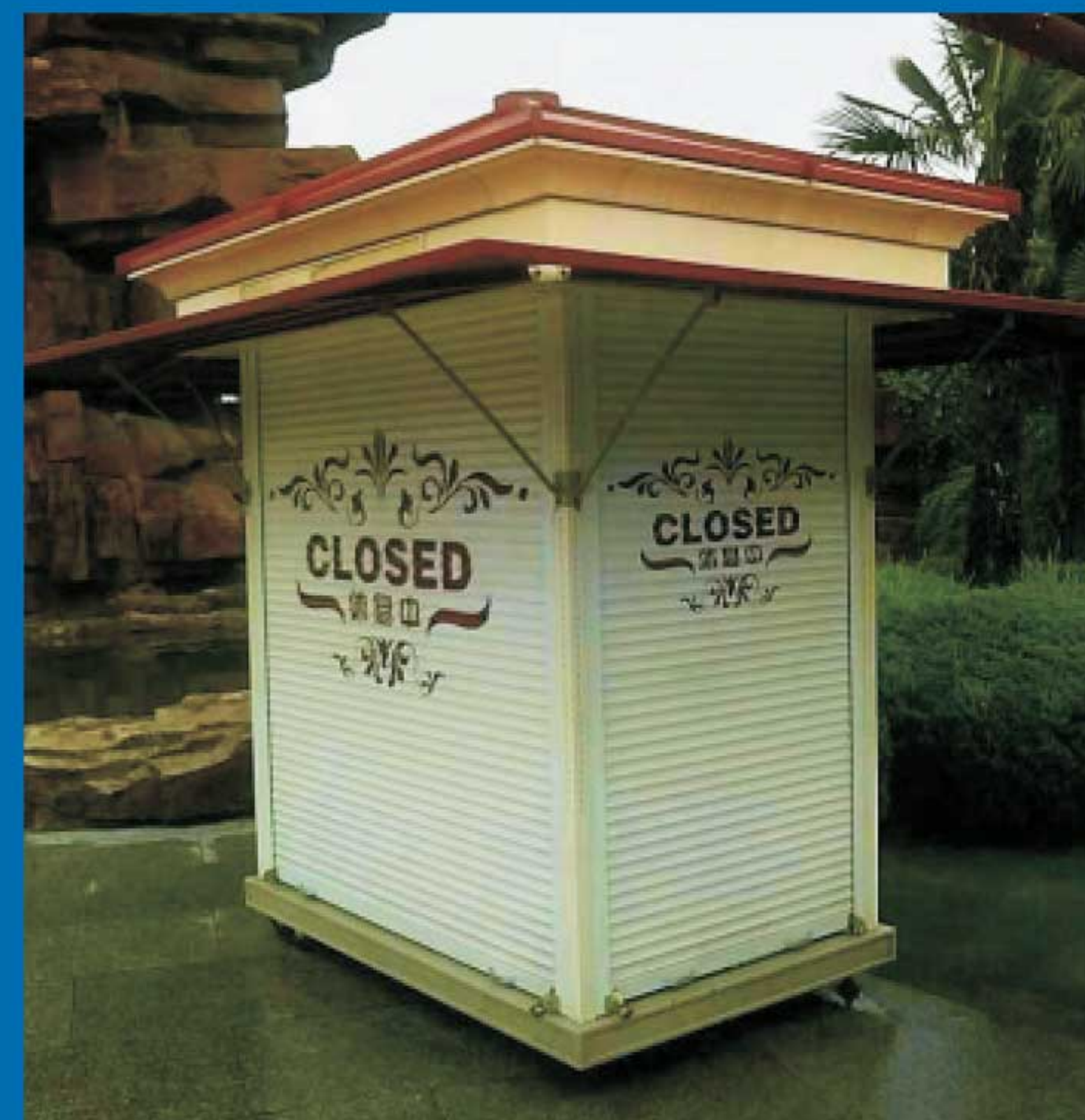


JG-B external motors can be opened and closed shutters by pulling an emergency chain during the power failure, apply to workshops, warehouse and other industrial shutter doors

roof rolling sunshades



booth roller shutters



France SF Somfy Motor



SF9101474



SF1810137



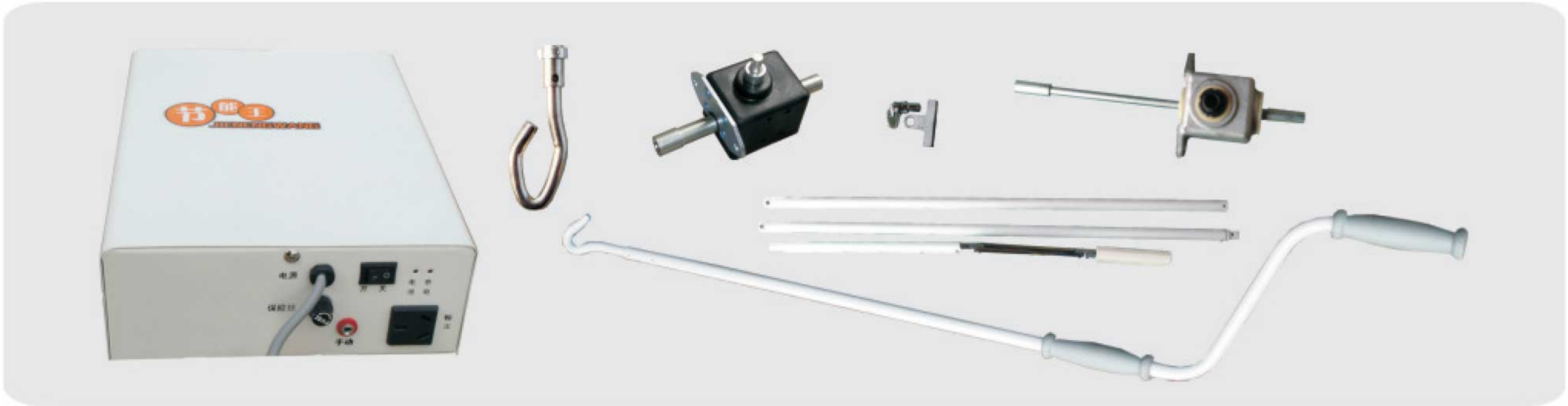
SF1805040



SF1810630



SF1810644



Standby Power	Power Off Lash-up Equipment
Manual Equipment	Rope Pull Equipment
Insert, Muffled Fitting	End Cover, End Plug
Available Color	

- 1 Assist angle
- 2 Top bracket
- 3 Roller
- 4 Motor
- 5 Torsion spring
- 6 Spring broken device
- 7 Tubular shaft
- 8 Cable drum
- 9 Upper track&horizontal track
- 10 Adjustable hinge
- 11 Middle hinge
- 12 Emergency lock
- 13 Bottom bracket
- 14 Handle
- 15 Vertical track
- 16 Door panel

## HARDWARE DESCRIPTION

Door may not open properly if installed near the top, depending on opening dimensions and lift type.



## CHOOSE YOUR CONSTRUCTION

The construction and insulation type improves energy efficiency, durability and noise control of the door.

Finger-protectional type



Panel width 430~600mm  
Panel thickness: 40mm  
Density: 45±2kg/m<sup>3</sup>  
Material: Galvanised steel  
Epoxy paint  
Foaming: B3 grade PU foam

Industrial Finger-protectional type



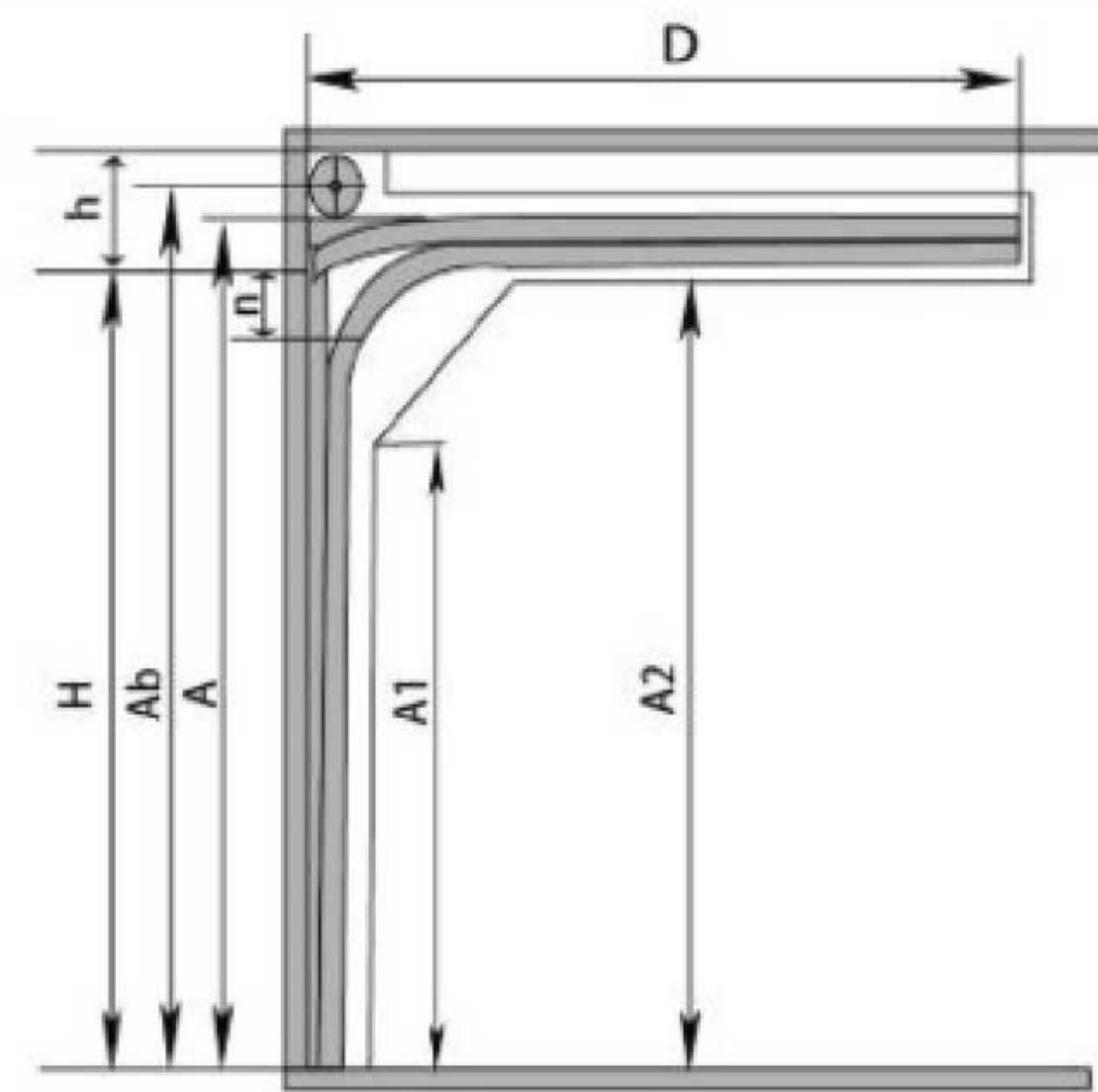
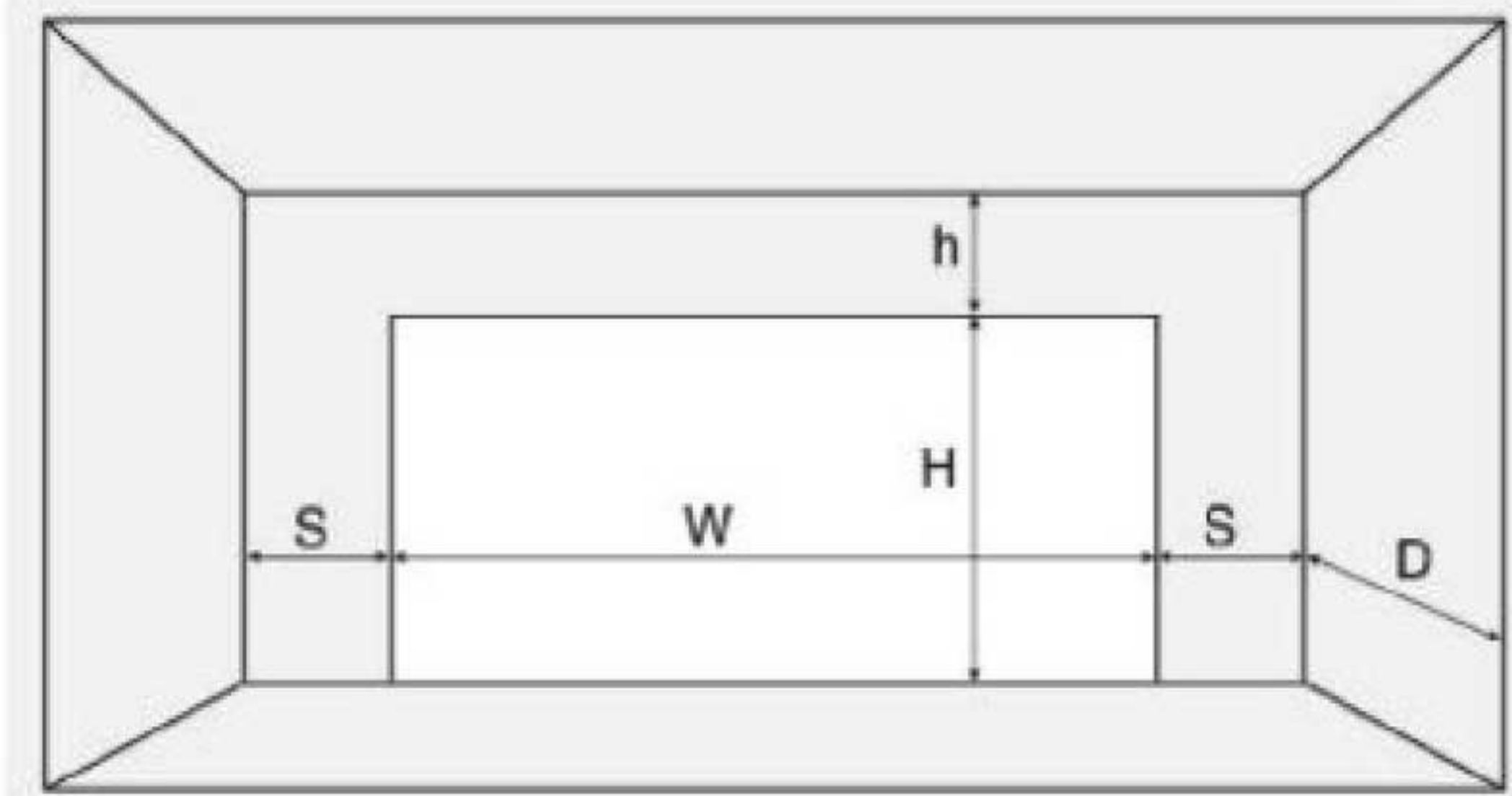
Panel width 500mm  
Panel thickness: 40mm  
Density: 45±2kg/m<sup>3</sup>  
Material: Galvanised steel  
Epoxy paint  
Foaming: B3 grade PU foam  
with 1.0mm thickness reinforcement steel  
Sponge seal





**HOW TO MEASURE**

Garage door sizes.

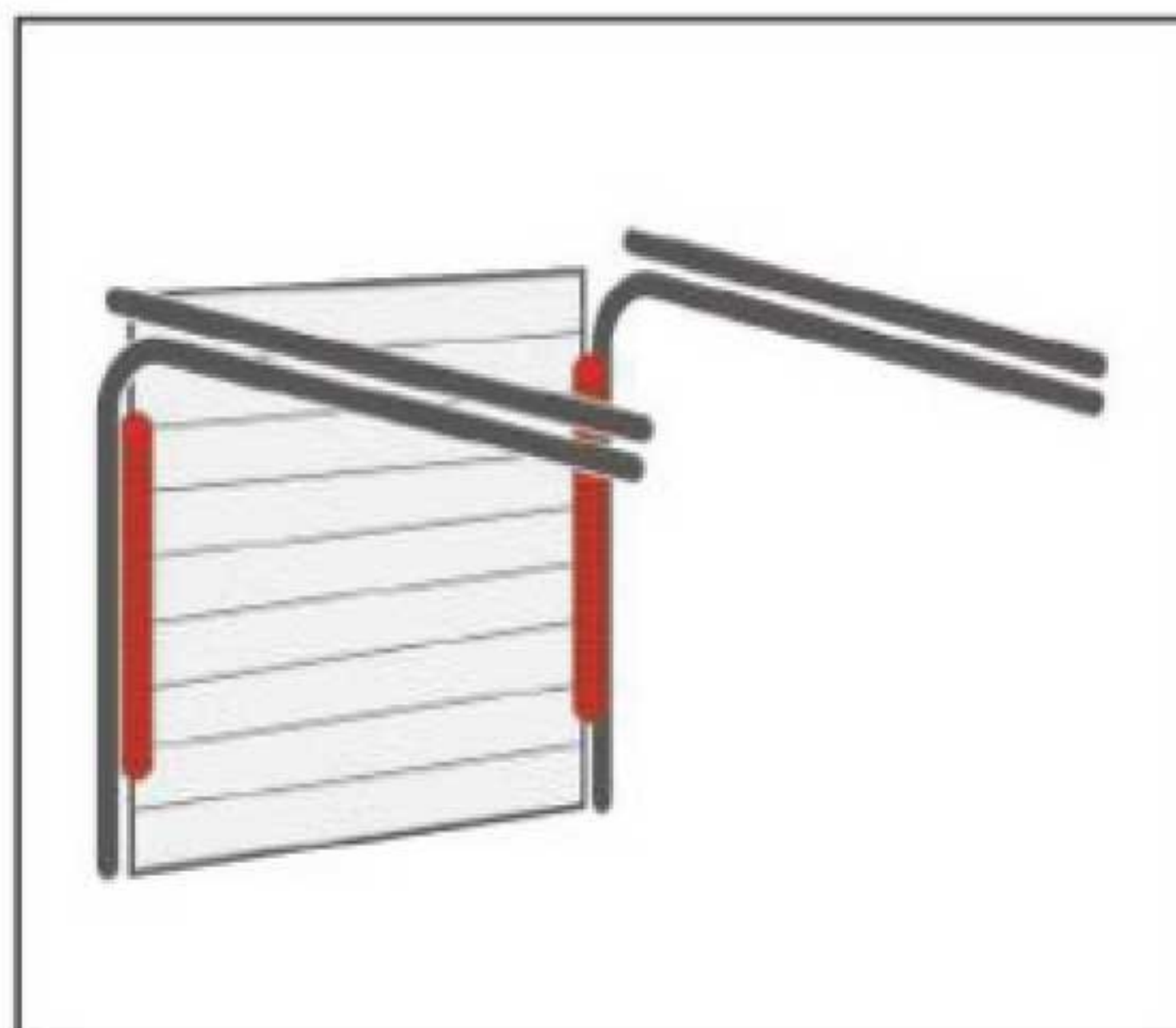


**RELIABLE OPERATION**

A MODULAR SYSTEM WITH A UNIVERSALLY ADJUSTABLE RAIL SET.

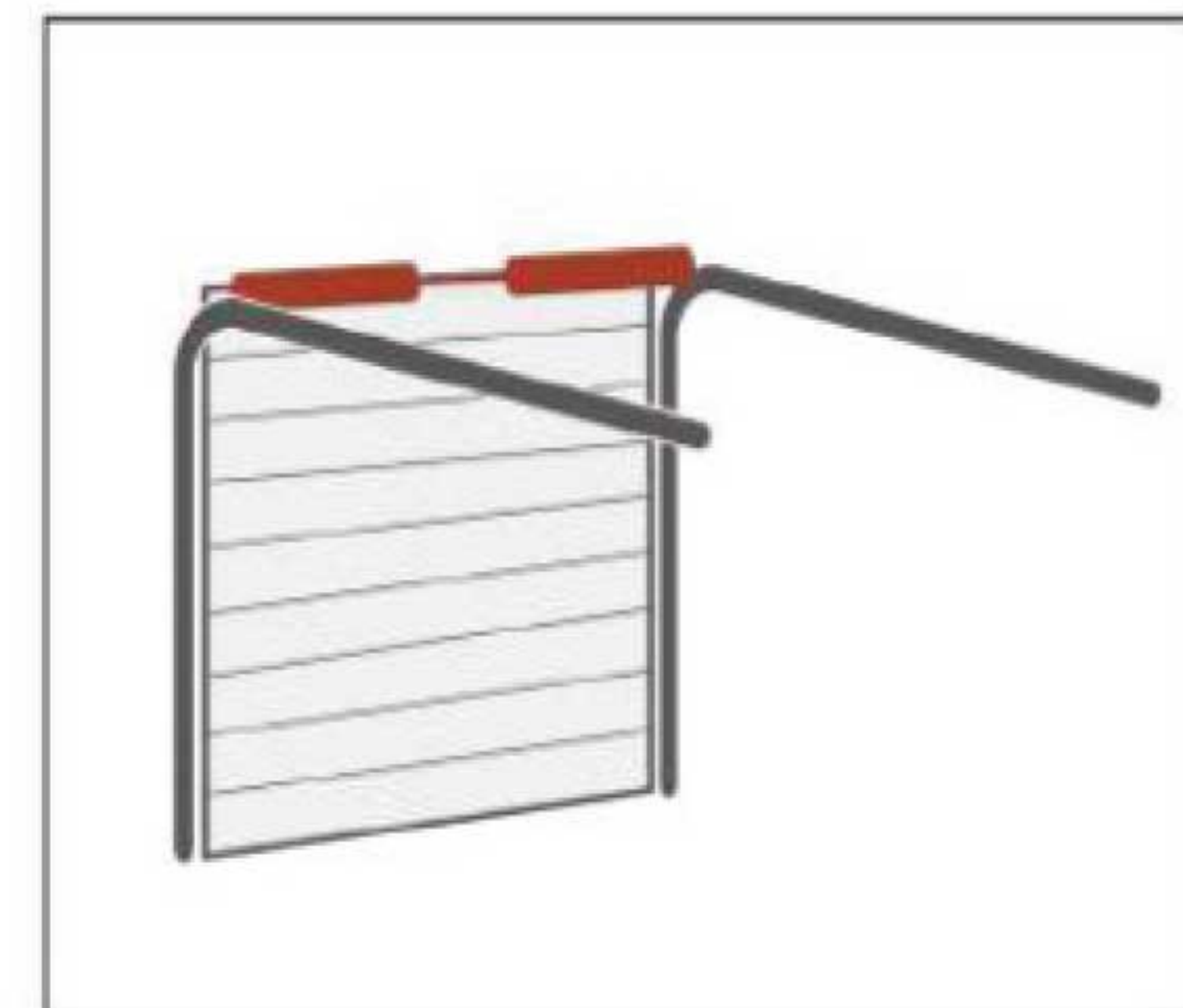
**Extension Spring**

Headroom min. 150mm (6")  
Economic  
For little installation space for the garage door.



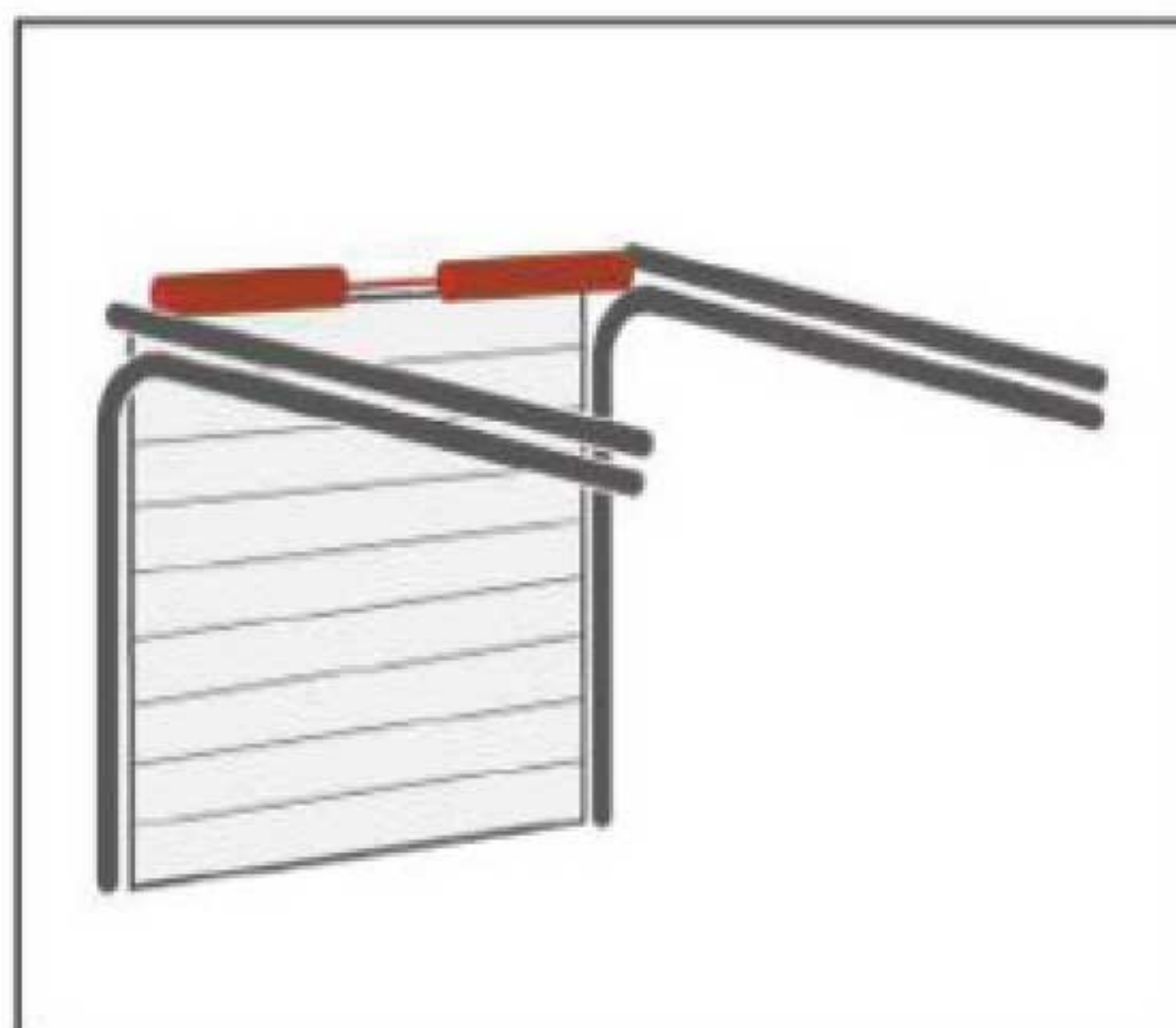
**Torsion Spring- Single track**

Headroom min.  
350mm(14") without L-frame  
min.  
450mm(18") with L-frame



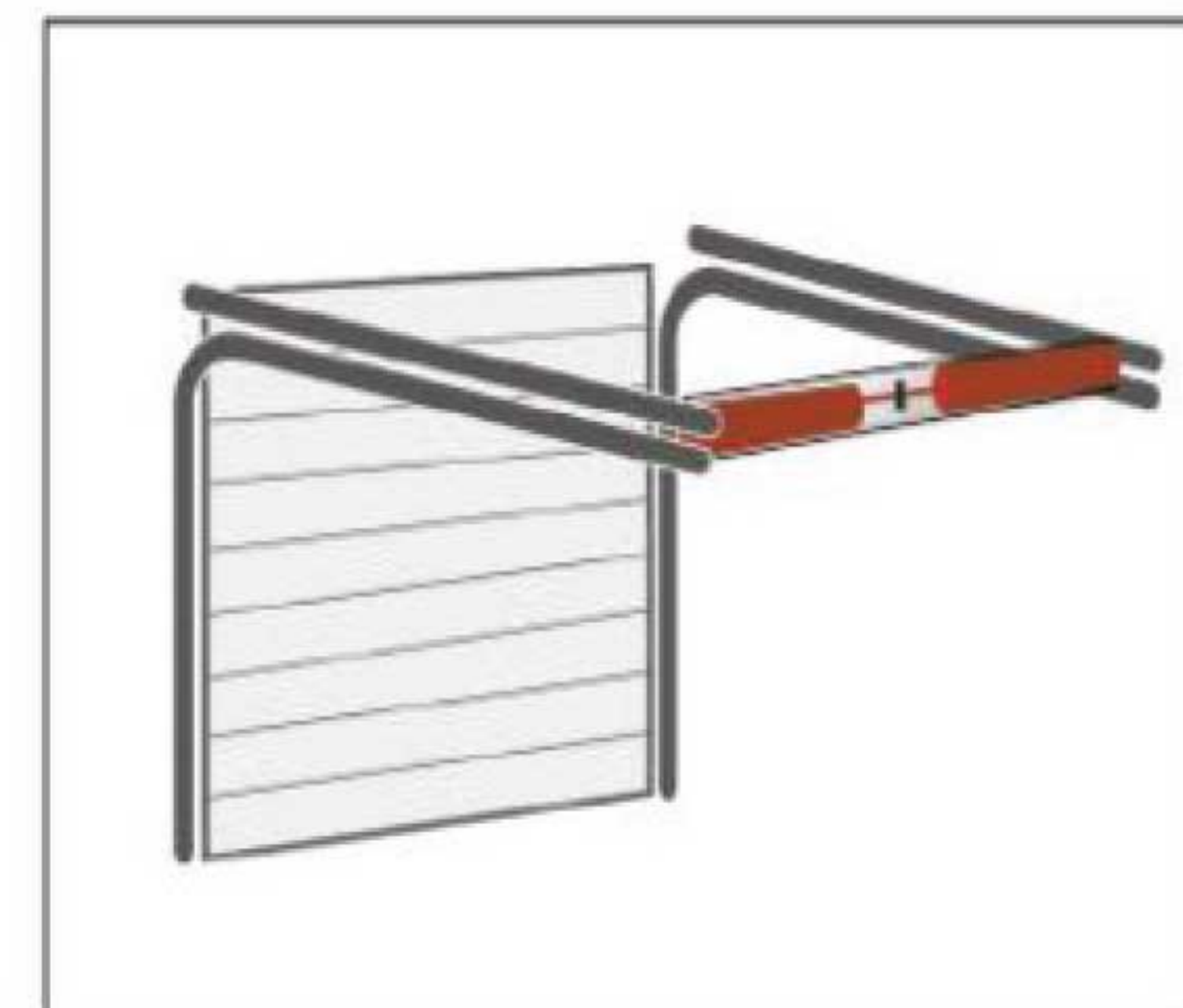
**Torsion Spring- Double track**

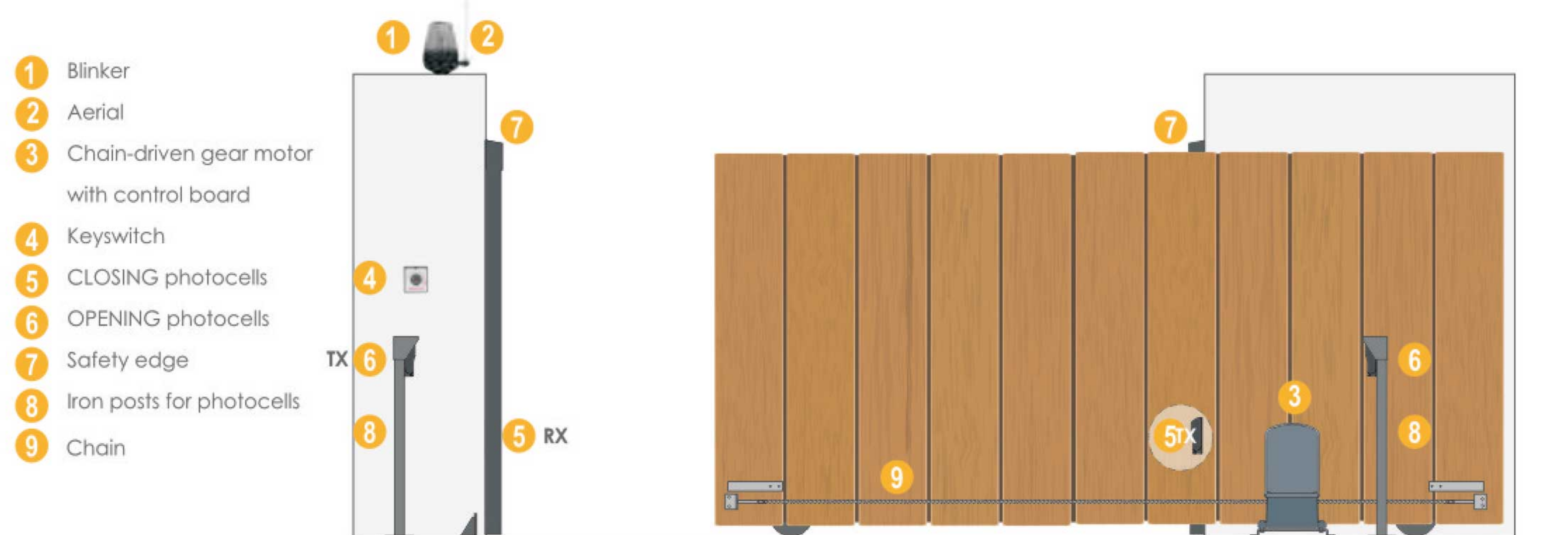
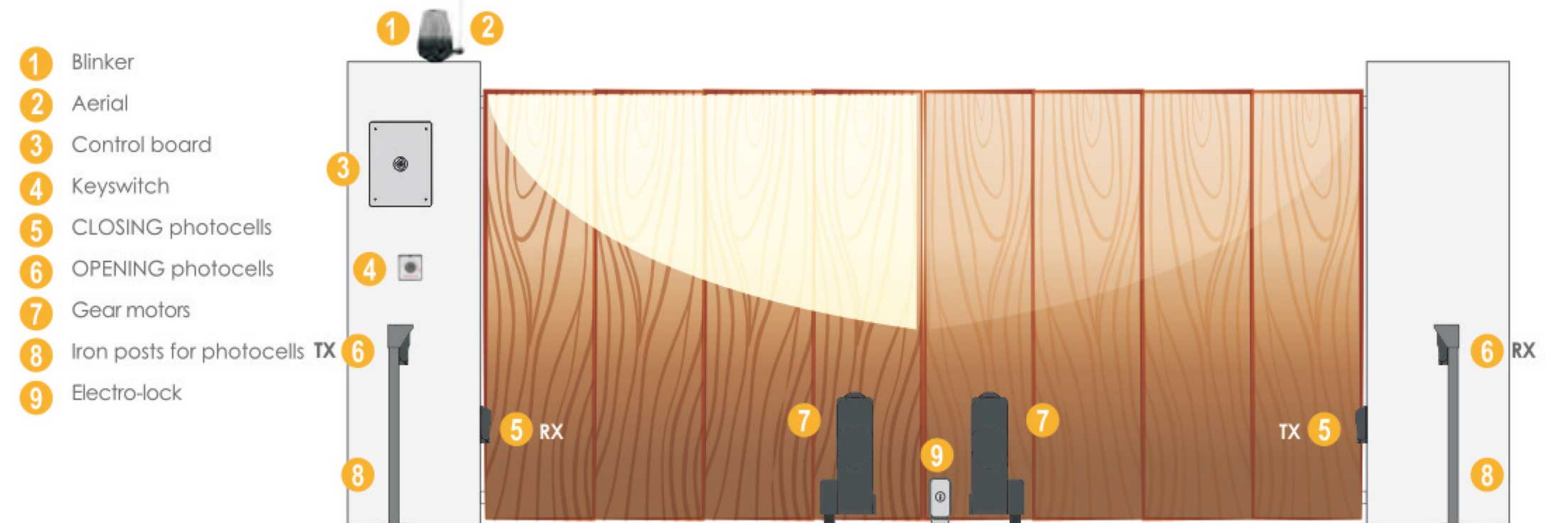
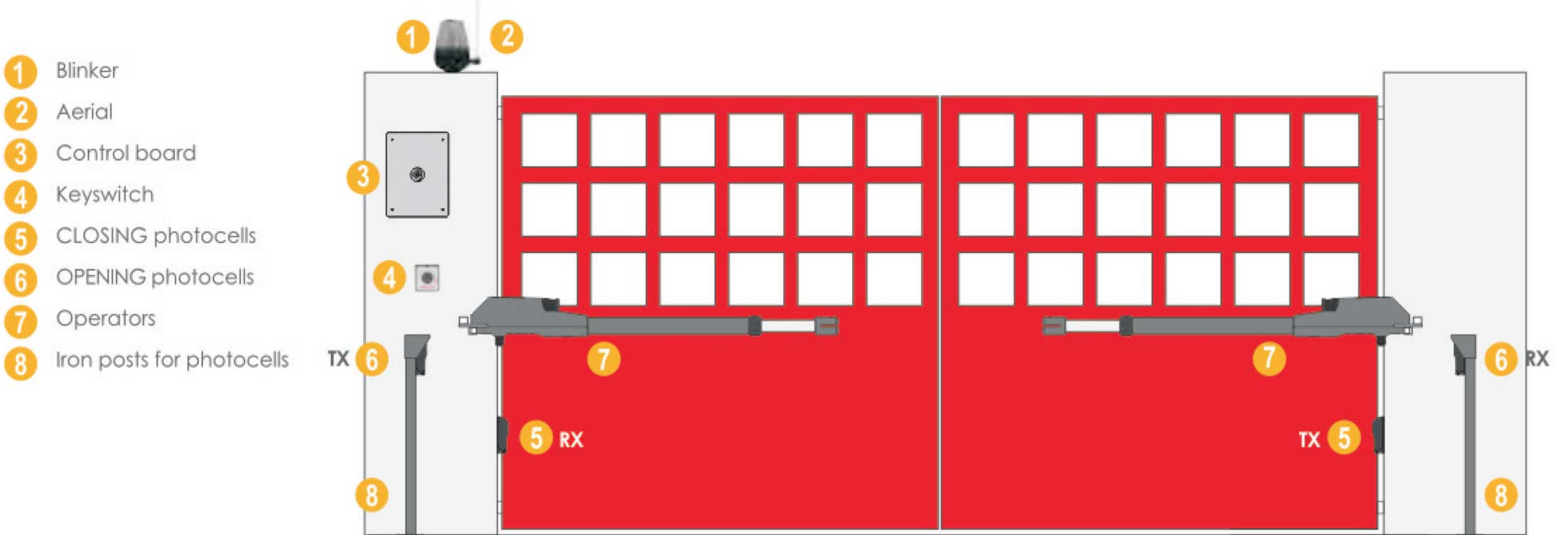
Headroom: general required  
250mm(10")  
Can adjust if headroom only  
200mm(8")

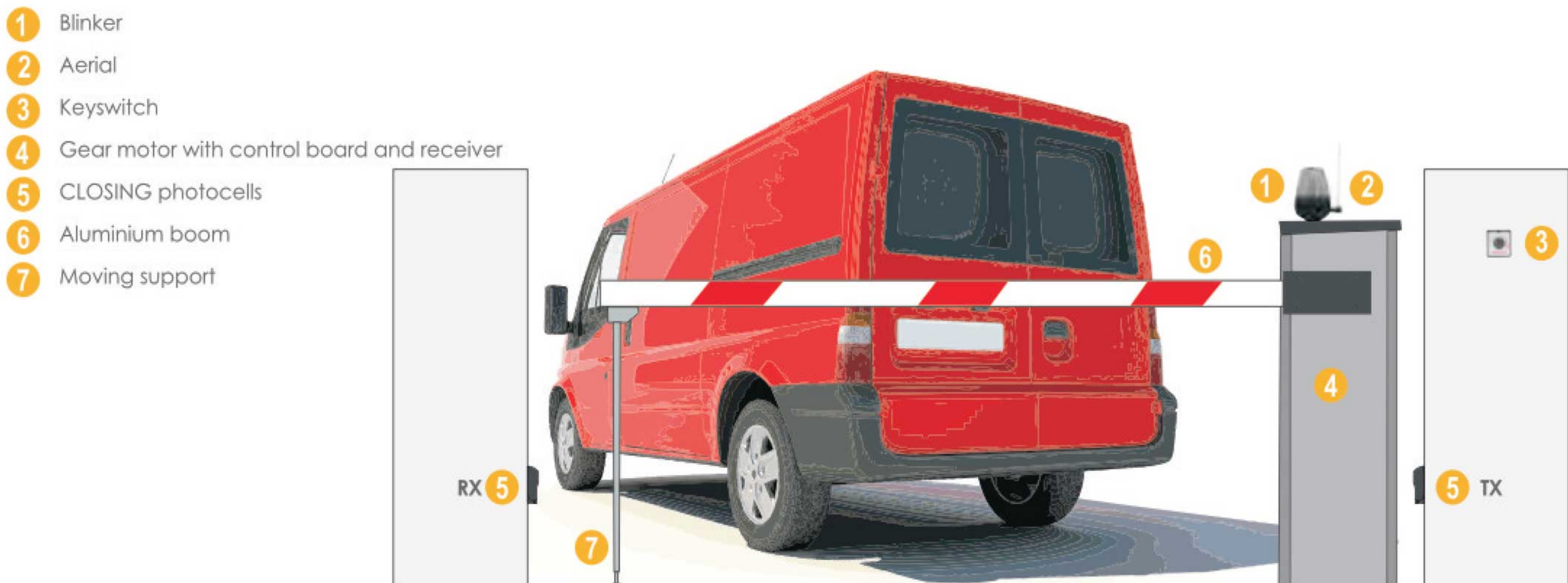
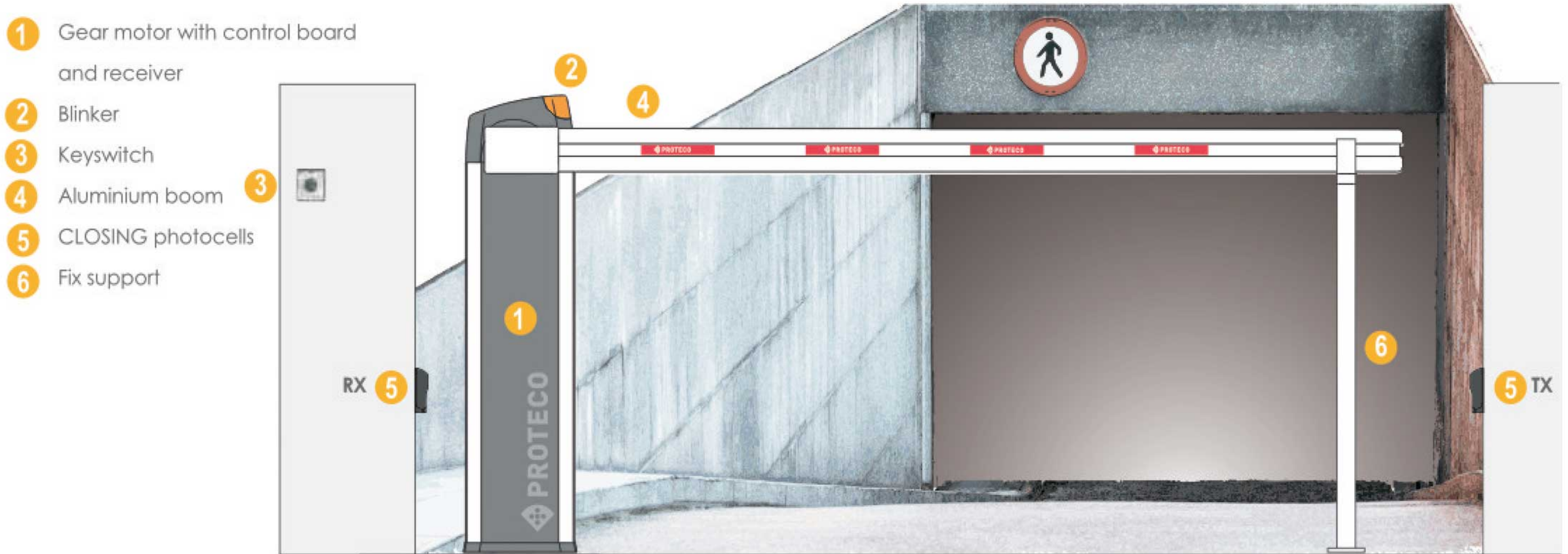
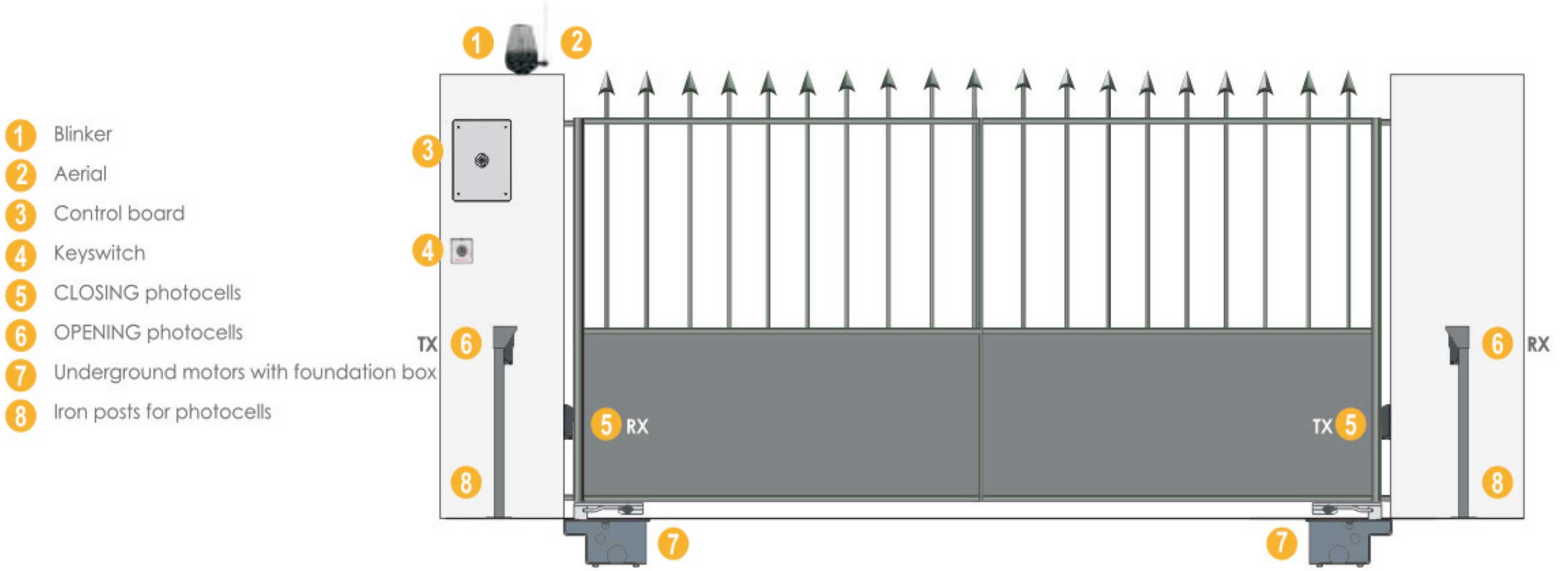


**Rear Spring**

Headroom min.150mm(6")  
Upgrade,Protect and Extend









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