Builder Solution US

SECTIONAL GARAGE DOOR

PRODUCT MANUALS

BS
Quality Matters

BUILDER SOLUTION US • • •
SINCE 2011

BS

Quality Matters

US

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Sectional Garage Door

Heat Insulation
The energy-saving polyurethane is high quality heat insulator, non-absorbing and wear-resistant material with R-value 13. 73.

Finger Protection
Safety is important to today's homeowner. As your door closes, the exclusive finger protection system gently pushes fingers away from section joints.

Triple-Layer
Triple-layer door includes the ultimate in thermal properties, plus a layer of steel for a finished interior look and adds durability.

High Strength & Resistance Material
Due to heavy-duty exterior and interior steel, polymeric coating keeps the door nice appearance, low maintenance. durable and reliable.

Air Tightness
The sealing system between door panels and around the door leaf increases the air tightness, prevents heat loss and blocks airflow between sections.

Noise Insulation
The thermal-insulation has sound-proof property. They prevent noise penetrating from the surroundings effectively.

Finish coat
Prime coat
Chemical concevsoon coat
Steel late

1

2

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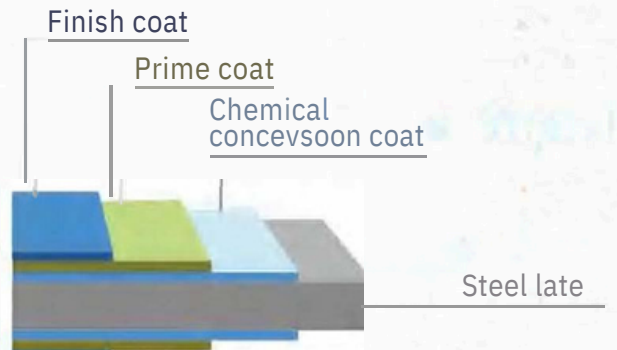
Surface Colors

Normal Color: White RAL9016;

Solid Colors: Brown RAL8014, Light Beige RAL 1015, Anthracite Grey RAL7016, Red RAL3000, Blue RAL5015, Silver RAL9006, Ebony RAL9004

White RAL9016	Silver RAL9006	Brown RAL8014	Ebony RAL9004

Timber Colors

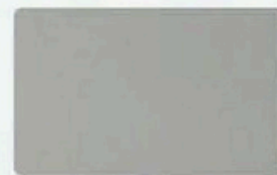| Mahogany	Gold Oak	Walnut	Maple

Surface Finishes

Woodgrain	Orange Peel	Fold	Flush

Panel Characteristics

Panel type: Finger protection panel & non finger protection panel

Material: Galvanized steel with PU foaming

Material thickness: 0.35mm/ 0.45mm/ 0.50mm

Section thickness: 40mm/ 50mm

Panel width: 440mm 550mm

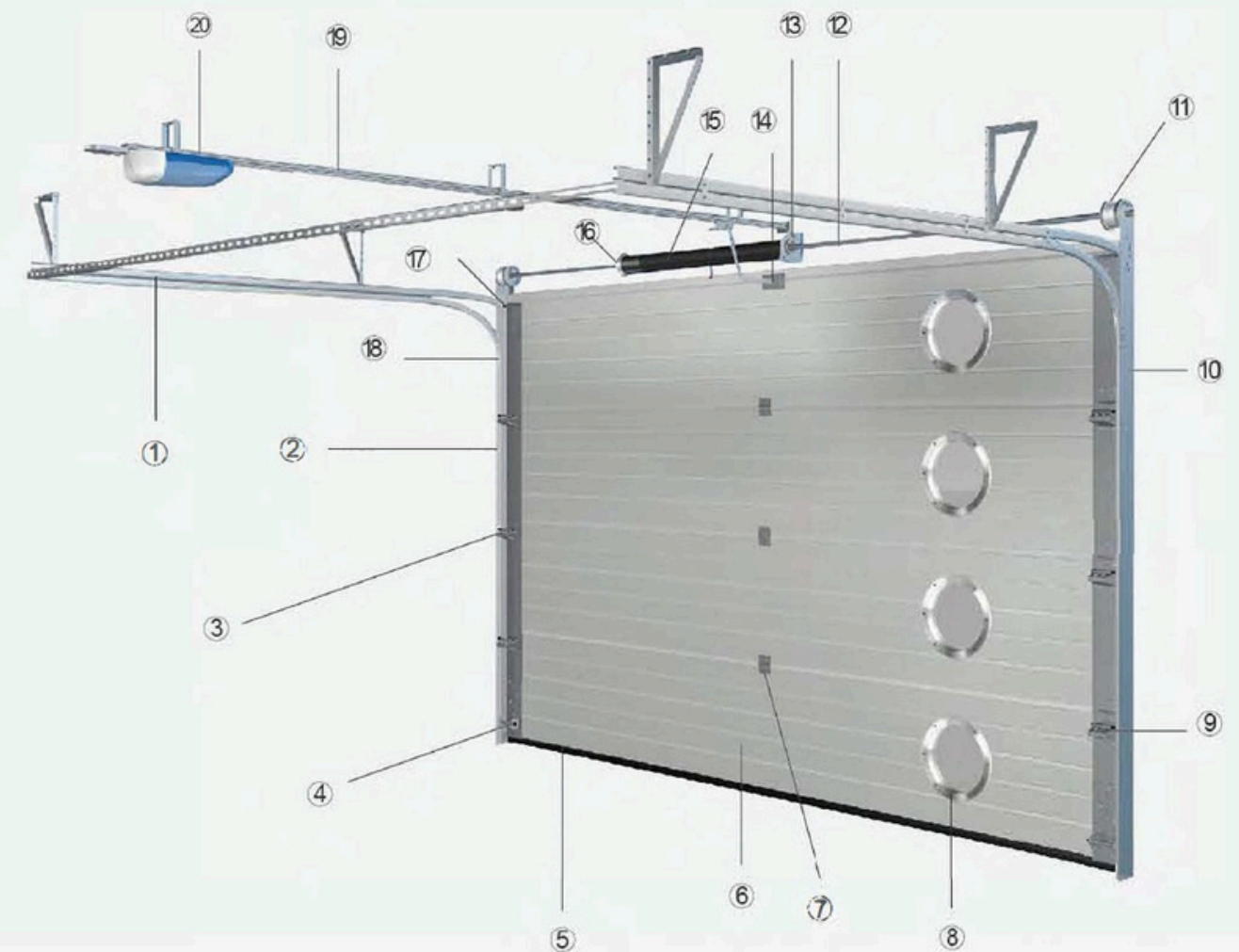Max available panel length: 12m

Woodgrain with Rectangle	Flush	Woodgrain with 1 Line	Woodgrain with 3 Lines

Structure Drawing of Sectional Door

① Horizontal track
② Vertical track
③ Nylon roller
④ Bottom roller bracket
⑤ Aluminum seal with rubber
⑥ Panel
⑦ Middle hinge
⑧ Round window
⑨ Side hinge
⑩ L profile support

⑪ Cable drum
⑫ Shaft
⑬ Middle bearing bracket
⑭ Motor cap
⑮ Torsion spring
⑯ Spring cones
⑰ Top roller bracket
⑱ Steel cable
⑲ Motor track
⑳ Motor

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--)> > /Garage Door Opener

Features

	111.111	km11?	mm1?	911?)	111
Input Voltage:	AC 220V-240V / 110V-127V, 50-60Hz				
Motor Power:	DC24V	DC24V	DC24V	DC24V	OC24V
Light Pcmer:	10W/24V	10W/24V	10W/24V	10W/24V	10W/24V
Max. LiftingF orce:	60KG	80KG	100K	120KG	150KG
Max. LiftingH eight:	3.60m	3.60m	G	3.60m	3.60m
Motor Rail:	3.0-4.Sm	3.0-4.Sm	3.0-4.Sm	3.0-4.Sm	3.0-4.Sm
Rail Type:	Chain/ Belt	Chain/ Belt	Chain/ Belt	Chain/ Belt	Chain/ Belt
Limit Setting:	Electronic	Electronic	Electronic	Electronic	Electronic
Transformer Technology	Overload Protection	Overload Protection	Overload Protection	Overload Protection	Overload Protection
Soft open&close:	Yes	Yes	Yes	Yes	Yes
Radio Frequency:	433.92MHz/ Rollingor Fixed	433.92MHz/ Rollingo r Fixed	433.92MHz/ Rollingo r Fixed	433.92MHz/ Rollingo r Fixed	433.92MHz/ Rollingor Fixed
WorkingE nvironment:	-20'C -70C	-20'C -70C	-20'C -70C	-20 C -70'C	-20'C -70'C
Protection Class:	IP20	IP20	IP20	IP20	IP20
Standard Kit:	1 Motor Head, 3.3m Motor Rail{Chain), 2pcs Transmitter, Other MountingA ccessories				

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Steel Track

----Belt Drive Track ----

----Chain Drive Track ---

----Aluminum Track ---

Operation

Using APP by Bluebooth Receiver

Remote Control

Photo Beam Protection

Wireless Pin Code Lock

Sectional Industrial Door

Sectional Industrial Doors ane widely applied for places of facilities-production, warehouse, commercial, office and other permises with heavy traffic intensity, they consist of three main elements: door leaf, track system and torsion mechanism. The door leaf can be made of finger protection sandwich panels, transparent panels, and it can be a combined one. It is available in all sliding systems and also with a range of versions with windows or with an inserted pedestrian door, depending on the ceiling and lintel design, and also other architectural room peculiarities. They are able to offer safety, reliability, advanced technology and personalisation.

Sectional Industrial Door

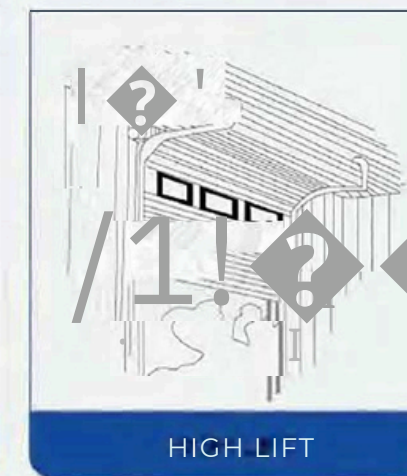| Panel Thickness	Max. Width	Max. Height	Max.SQM
40mm	8000mm	6000mm	40.00
50mm	9000mm	8000mm	50.00

Industrial door with pedestrian door

Industrial door with window
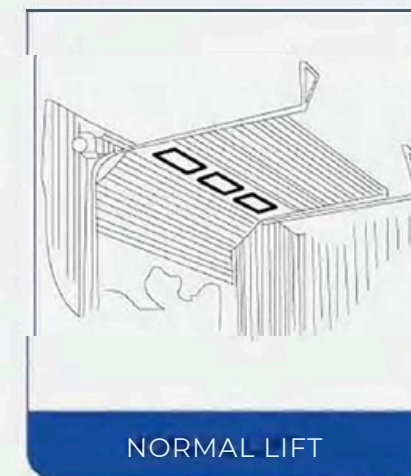
NORMAL LIFT
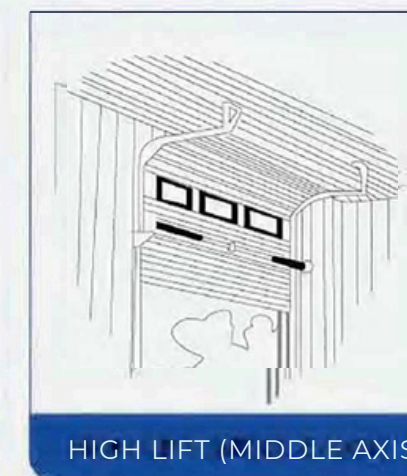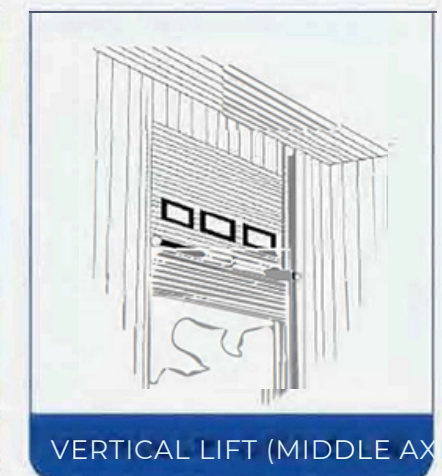

HIGH LIFT

VERTICAL LIFT
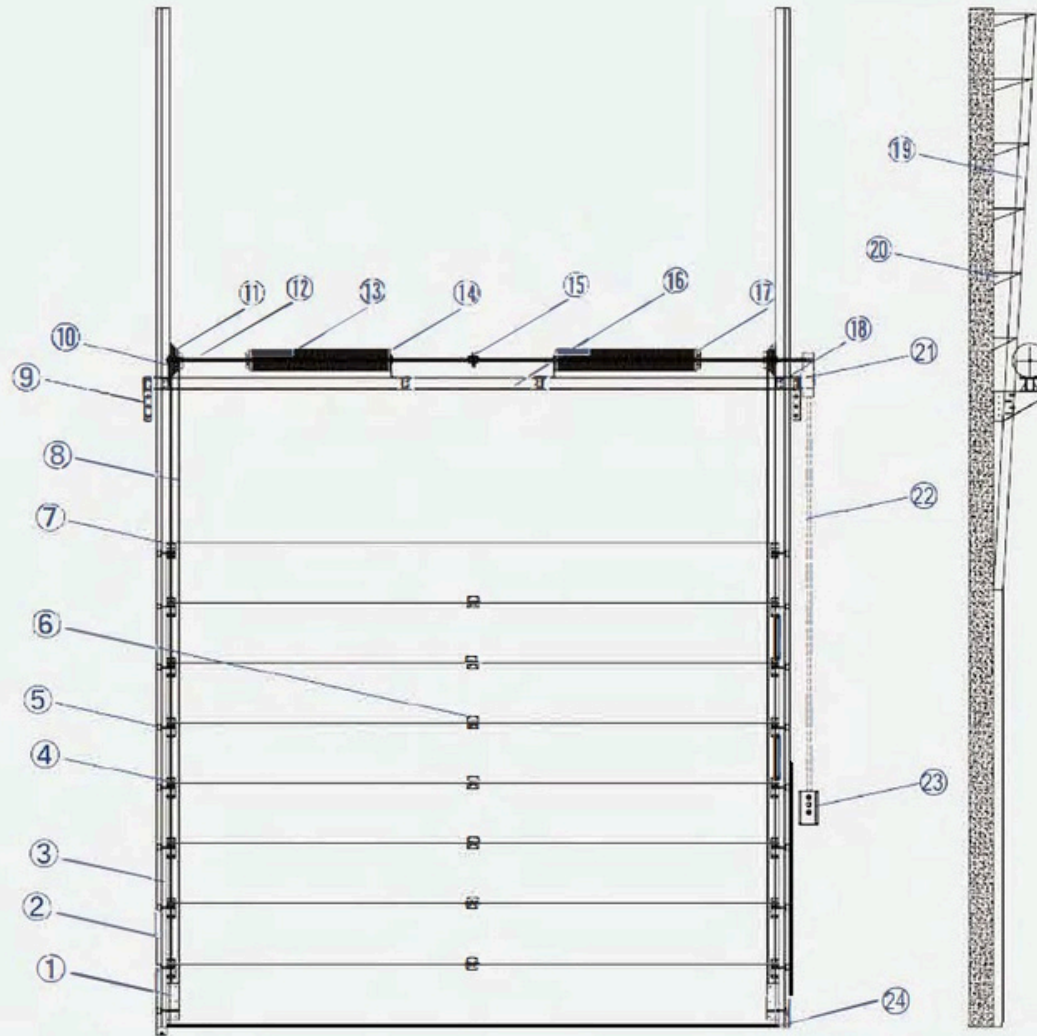

NORMAL DECLINING LIFT

HIGH LIFT (MIDDLE AXIS)

VERTICAL LIFT (MIDDLE AX

Structure Drawing of Sectional Industrial Door

① Safety Bottom Bracket
② L Profile Support (for lower vertical Track)
③ 2" Lower Vertical Track
④ Side Hinge
⑤ Roller
⑥ Middle Hinge
⑦ Top Roller Bracket
⑧ Steel Cable
⑨ Shaft Support Bracket
⑩ Side Bearing Bracket
⑪ VL Cable Drum
⑫ Solid Shaft
⑬ Torsion Spring
⑭ Spring Anti-break
⑮ Shaft Coupler
⑯ Rectangle Middle Post
⑰ Spring Stationary
⑱ Holding Bracket
⑲ 2" Upper Vertical Track
⑳ Upper Track Fixing Bracket
㉑ Shaft-drive Motor
㉒ Manual Chain Hoist
㉓ Push Button
㉔ Bottom Seal with Airbag Sensor

Industrial Door Motor
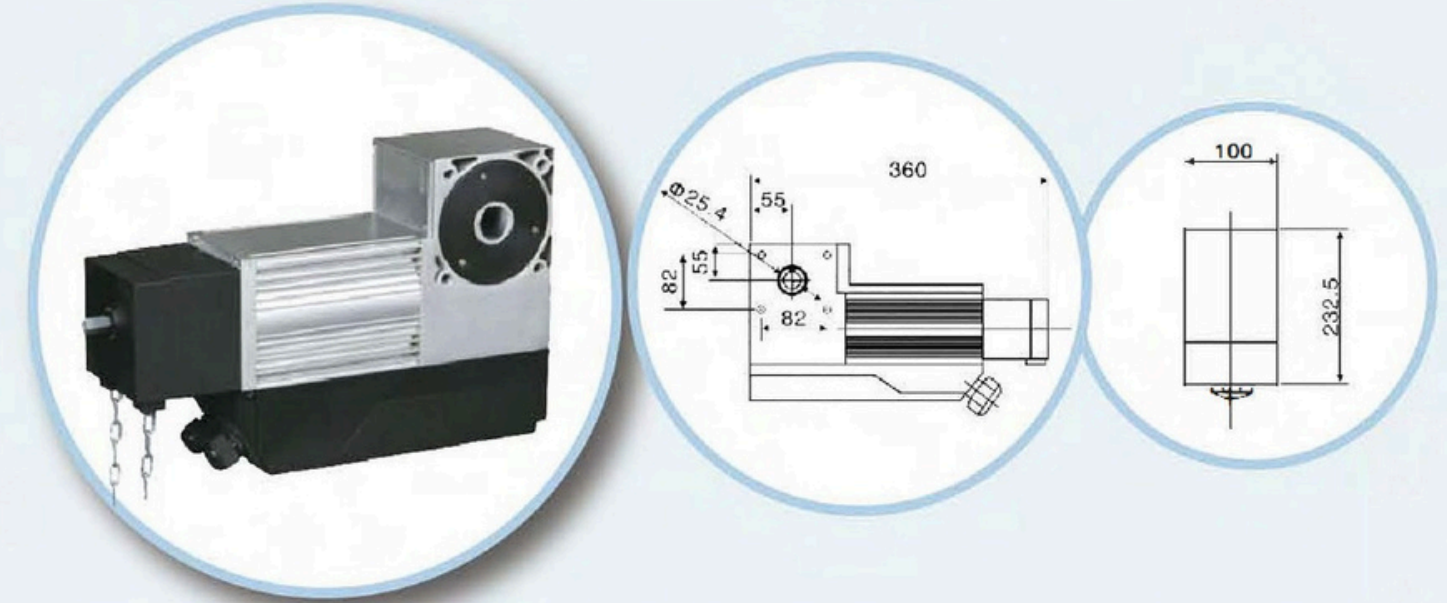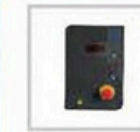
	Standard	Control box	Installation bracket	Remote control	Alarm lamp	Universal hand chain
	Optional					

Type	MO.SIF30	MO.SIF50
Power Supply	220V/50Hz	380V/50Hz
Output Torque	30N.m	50N.m
Output Rotation Speed	32r/min	32r/min
Motor Rotation Speed	1400r/min	1400r/min
Motor Power	300W	400W
Thermal Protection	120℃	120℃
Max.Continuous Working Time	10min	20min
Ambien Temperature	-20℃ 45℃ (-40℃ customization available)	
Barrel Diameter	Φ25.4mm	Φ25.4mm
Flat Key	6mm x 5mm x 70mm	6mm x 5mm x 70mm
Net Weight	12kg	12kg
Dimensions	100 x 233 x 360mm	100 x 233 x 360mm
Max. Rotation	28 cycles	28 cycles
Applictaion Door SQM	<18m²	<25m²

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≫ Aluminum Sectional Overhead Door

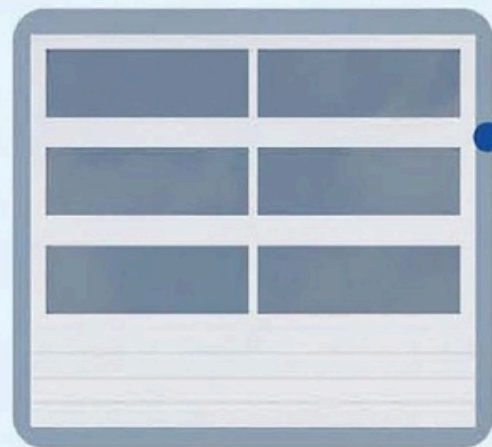# ≫ Aluminum Sectional Overhead Door

MODEL AF4050

- Durable **40MM finger protection** aluminum frame section
- **Frame:** Anodized or powder coated finishes
- **Frame color customization:** Clear Anodized, powder coating in White, Bronze, Brown, Black etc
- Polycarbonate or tempered **glass/panel options**
- **Great weather barrier** provided by tongue and groove joints
- **Flexible vinyl bottom seal** against dirt, noise and air infiltration&drafts
- **Pedestrian door option** available
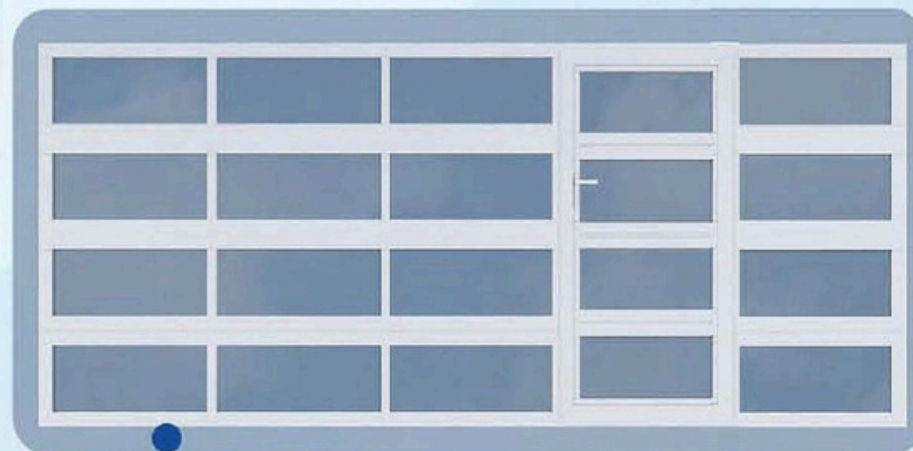- Compatible with Steel Insulated Panel
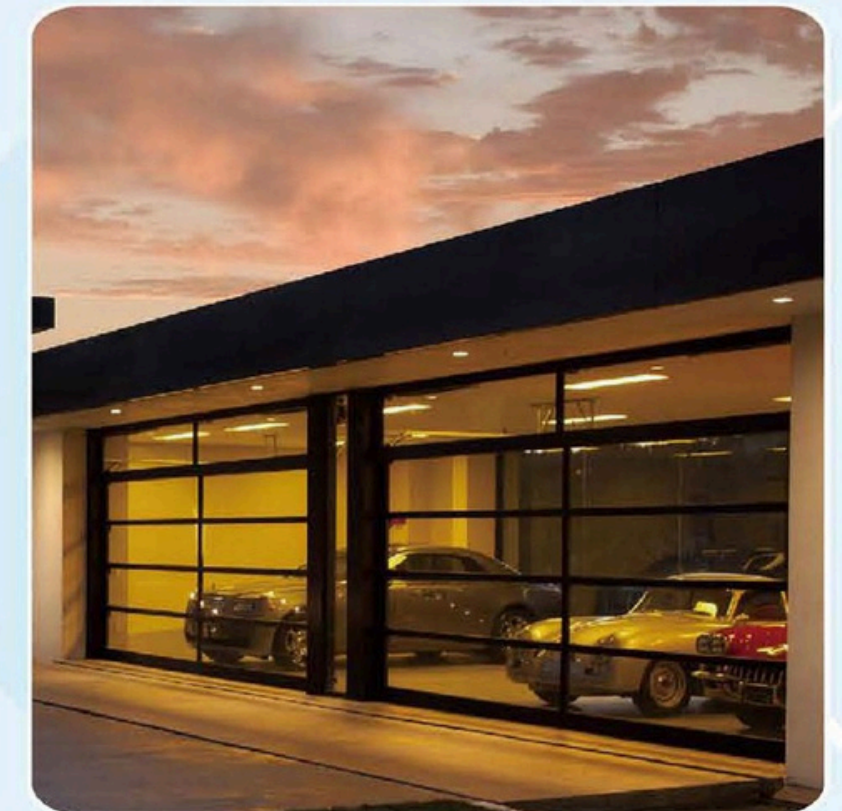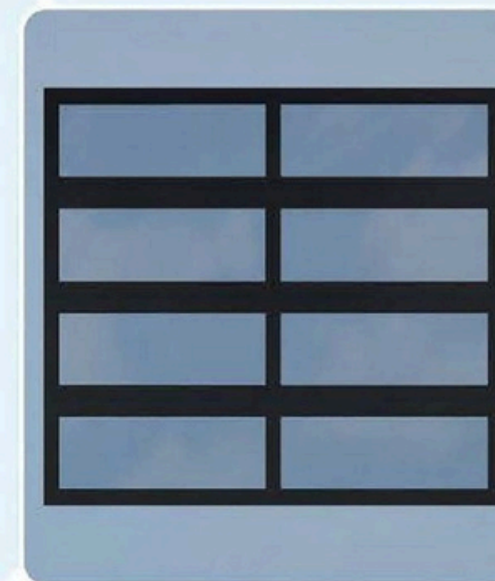
MODEL AN5081US

- **50MM** Non finger protection aluminum frame section
- **Frame:** Anodized or powder coated finishes
- **Frame color customization:** Clear Anodized, powder coating in White, Bronze, Brown, Black etc
- **Multiple glass panel option:** Polycarbonate, Tempered glass, Aluminum-plastic composite panel, spun silk glass .etc.
- **Customizing glass effects:** Clear, frosted, double glazing, laminated, mirror effect, Silk print image .etc.
- **Superior thermal efficiency** optional with Polyurethane injection inside aluminum frame structure
- **Pedestrian door option** available

With Insulated Panel

— **With Pedestrian Door**

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Aluminum Sectional Overhead Door

MODEL AN5005ZA

- **60MM** Non finger protection aluminum frame section
- **Frame structure INVISIBLE** for outside look
- **Frame:** Anodized or powder coated finishes
- **Frame color customization:** Clear Anodized, powder coating in White, Bronze, Brown, Black etc
- **Special glass option:** Mirror effect tempered glass Aluminum-plastic composite panel, silk printed glass, spun silk glass .etc
- **Superior thermal efficiency** optional with Polyurethane injection inside aluminum frame structure
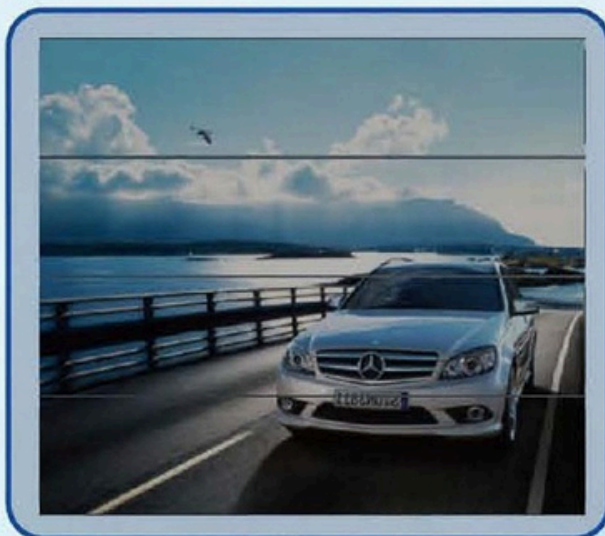
Glass/Panel Options ▶

PC Sheet-Clear

Tempered Glass-Clear

Laminated Glass White
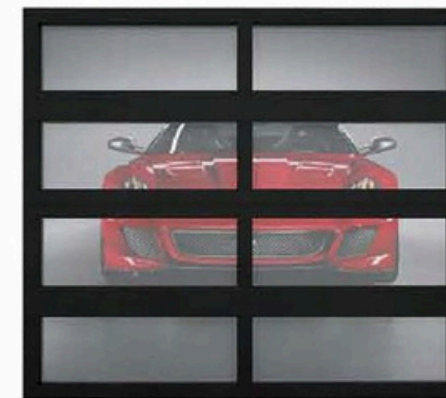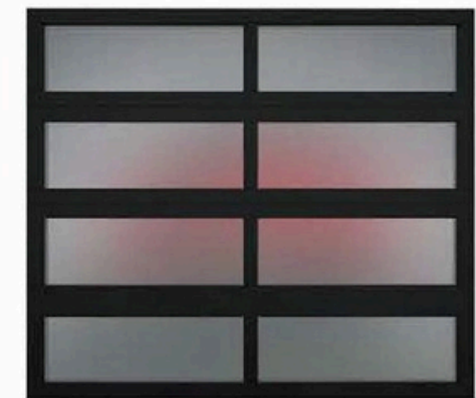
Tinted Glass Grey

PC Sheet- Frosted

Tempered Glass Frosted
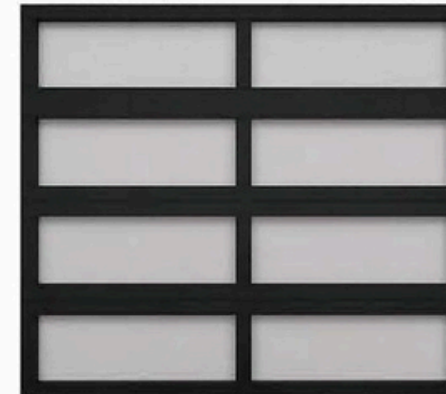
Alu-Composite Panel

Mirror Glass

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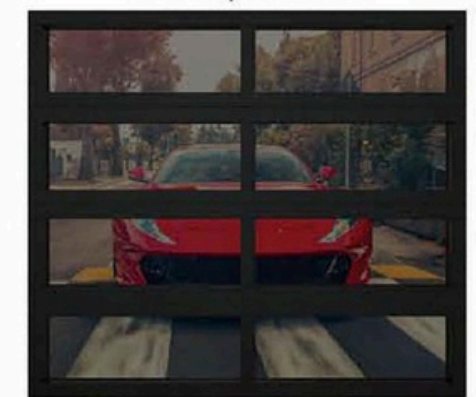
Garage Door Opener Accessories

Transmitter

Photo Beam
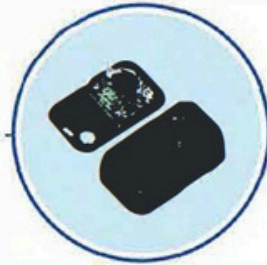
Safety Airbag Sensor

WiFi Receiver

Bluetooth Receiver

Pin Code Lock
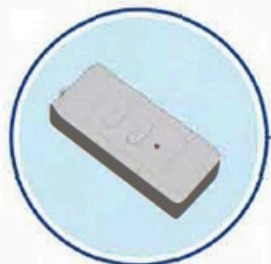
Wire/Wireless Wall Switch

GSM Remote Control

Garage Door Window Options

NO.1

NO.2

NO.3

NO.4

NO.5

NO.6

Door with visible window NO.6

Door with visible Round window
Inner Dia: 330mm/Outer Dia: 360mm

15

16

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Garage Door Parts

No.1 Hinge MAS0001.1
Thickness:1.8mm (14GA)
For 4" stem rollers only

No. 4 Hinge MAS0001.4
Thickness:1.8mm (14GA)
For 4" stem rollers only

No. 2 Hinge MAS0001.2
Thickness:1.8mm (14GA)
For 4" stem rollers only

No. 5 Hinge MAS0001.5
Thickness:1.8mm (14GA)
For 4" stem rollers only

No. 3 Hinge MAS0001.3
Thickness:1.8mm (14GA)
For 4" stem rollers only
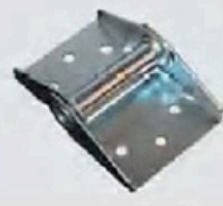
Middle Hinge MAS0002
Thickness:1.8mm (14GA)
For PU foamed panel only

Side Hinge MAS0101
Thickness:2.0mm Galvanized steel / Width:60mm
For 4" stem rollers SF40S / SF40 only

Side Hinge MAS0801
Thickness:2.5mm / Width 70mm
For 4" stem rollers only

Side Hinge MAS0501
Thickness:2.5mm / Width:65mm
For 4" stem rollers, SF40S/SF40 only

Side Hinge MAS1001
Thickness:2.0mm / Width: 65mm
For 4" stem rollers only

Side Hinge MAS0601
Thickness:2.0mm / Width 65mm
For 4" stem rollers only

Double Side Hinge MAS0501DB
Thickness:2.5mm / Width: 130mm
For 7" stem rollers, SF40S / SF40 only

Garage Door Parts

Double Side Hinge Tube MAS0556

Thickness:2.5mm / Width: 150mm

For 7" stem rollers only

Side Hinge MAS1201

Extruded Aluminum / 60mm

For 4" stem rollers only

Side Hinge MAS1101

Thickness:2.0mm / 70mm For industrial use

For 4" stem rollers, SF40S/ SF40 only

Intermedia Hinge MAS0102

Thickness:2.0mm / 60mm

For SF40S panel only

Side Hinge MAS0701

Casting Aluminum / 60mm

For 4" stem rollers, SF40S / SF40 only

Intermedia Hinge MAS0102.B

Thickness:2.0mm / 60mm

For SF40S / SF40 panel only

Intermedia Hinge MAS0502

Thickness: 2.5mm / 65mm

For SF40S / SF40 panel only

Intermedia Hinge MAS1002

Thickness:2.0mm

Width 65mm

Intermedia Hinge MAS0602

Thickness:2.5mm

Width: 65mm

Intermedia Hinge MAS1102

Thickness:2.0mm Galvanized steel / Width: 90mm

For SF40S / SF40 panel only

Intermedia Hinge MAS0802

Thickness:2.0mm

Width: 65mm

Intermedia Hinge MAS0302

Casting Aluminum / Thickness:2.5mm

Width: 60mm

Garage Door Parts

Top Roller Bracket MAS0003

Thickness:1.5mm

For 4" stem rollers only

Top Roller Bracket MAS0603

Thickness:2.5mm

For 4" stem rollers only

Top Roller Bracket MAS0803

Thickness:2.5mm

For 4" stem rollers only

LHR Top Roller Bracket MAS0903

Thickness:1.8mm

Length: 220mm / 400mm

Top Roller Bracket MAS0703

Casting Aluminum

For 4" stem rollers only

Bottom Bracket MAS0004

Thickness:2.3mm

Safety Bottom Bracket MAS0804

Casting Aluminum

Bottom Bracket MAS0604

Thickness:2.5mm

Max lifting: 165KG

Safety Bottom Bracket MAS0504A

Unadjustable, for 2" track only

Max lifting: 750KG

Bottom Bracket MAS0304

Casting Aluminum

Safety Bottom Bracket MAS0504B

Adjustable, For 2" track only

Max lifting: 750KG

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Garage Door Parts
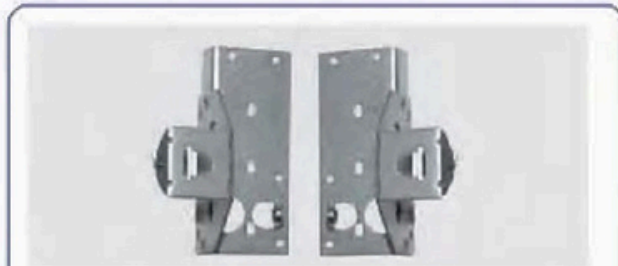
Bottom Bracket MAS0704

Thickness:2.5mm / 4.0mm

Max lifting: 100KG, For industrial use only

Bearing Bracket MAS0105

Thickness:2.0mm

Distance: 65mm

Safety Bottom Bracket MAS0904

Adjustable, for 3" track

Max lifting: 750KG

Bearing Bracket MAS0005

Thickness:2.5mm

Distance: 84mm
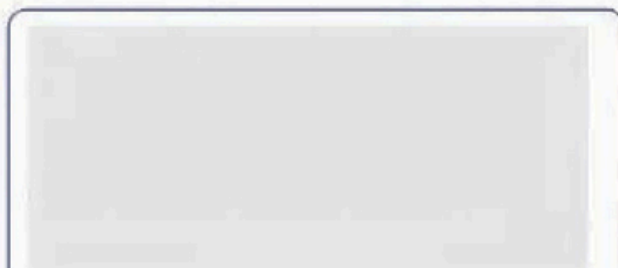
Bearing Bracket MAS0605

Thickness:2.5mm

Distance: Adjustable

Spring Anti-Break MAS0505

For 1"3/4 and 2" spring only

Bearing Bracket MAS0705

Thickness:4.0mm

Distance: 110mm, 123mm, 152mm

Spring Anti-Break MAS0305

For 2"5/8 and 3"3/4 spring only

Bearing Bracket MAS0805

Thickness:4.0mm

Distance: 152mm

Support Bracket MAS0356

Thickness:4.0mm

Extend distance to 152mm for 6" spring

Side Bearing Bracket MAS0606

Thickness:2.5mm

Distance: 65mm/84mm

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Garage Door Parts

Flanged Bearing MAS0036

1" bore

Outside Diameter: 2"

Nylon Roller MAS0007

Diamater: 2", for 2" track only

Stem: 4" / 7 ball, 11ball

Flanged Nylon Bushing MAS0136

1" bore

Outside Diameter: 2"

Steel Roller MAS0507

Diameter: 2", for 2" track only

Stem: 4" / 10 ball

Jamb Bracket MAS0527

Thickness:2.5mm

Length: A76mm / B93mm / C104mm / D115mm

Nylon Roller MAS0707

Diameter: 2", for 2" track only

Stem: 7" / 11ball

Steel Roller MAS0607

Diameter: 2", for 2" track only

Stem: 7" / 10 ball

Nylon Roller MAS0907

Diameter: 2", for 2" track only

Stem: 7" / Precision 6200ZZ

Steel Roller MAS0608

Diameter: 3", for 3" track only

Stem: 7" / 10 ball

Roller Protect MAS0134

Plastic

For 2" roller

Nylon Roller MAS0807

Diameter: 2", for 2" track only

Stem: 4" / Precision 6200ZZ

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Garage Door Parts

8'NL Cable Drum MAS0013.NL8
Max Lifting Height: 8'
Max Cable diameter: 1/8"

10'NL Cable Drum MAS0013.NL10
O.D.: 83mm / Max Lifting Height: 10'
Max Cable diameter: 1/8"

12' NL Cable Drum MAS0013.NL12
Max lifting Height: 12'
Max Cable diameter: 5/32"

18'NL Cable Drum MAS0013.NL18
Max Lifting Height: 18'
Max Cable diameter: 3/16"

12'NL Cable Drum MAS0013.NL12B
3 Nuts / Max lifting Height: 12'
Max Cable diameter: 5/32"

18'NL Cable Drum MAS0013.NL18B
3 Nuts / Max Lifting Height: 18'
Max Cable diameter: 3/16"

32'NL Cable Drum MAS0013.NL32
Max Lifting Height: 32'
Max Cable diameter: 1/4"

11'VL Cable Drum MAS0315.VL11B
3 Nuts / Max Lifting Height: 11'
Max Cable diameter: 3/16"

32'NL Cable Drum MAS0013.NL32B
3 Nuts / Max Lifting Height: 32'
Max Cable diameter: 1/4"

18'VL Cable Drum MAS0315.VL18
Max Lifting Height: 18'
Max Cable diameter: 3/16"

11'VL Cable Drum MAS0315.VL11
Max Lifting Height: 11'
Max Cable diameter: 3/16"

28'VL Cable Drum MAS0315.VL28B
3 Nuts / Max Lifting Height: 28'
Max Cable diameter: 1/4"

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Garage Door Parts

4-54HL Cable Drum MAS0314

Max Lifting Height: 54" vertical + 120"

Max Cable diameter: 1/8"

164HL Cable Drum MAS0314

Max Lifting Height: 164" vertical + 229"

Max Cable diameter: 1/4"

5-54HL Cable Drum MAS0314

Max Lifting Height: 54" vertical + 180"

Max Cable diameter: 3/16"

Spring Fittings 1"3/4U MAS0017

Universal thread

Max wire diameter: 295

120HL Cable Drum MAS0314

Max Lifting Height: 120" vertical + 144"

Max Cable diameter: 3/16"

Spring Fittings 2"U MAS0017.2U

Universal thread

Max wire diameter: 306.5

Spring Fittings 2"5/8U MAS0317

Universal thread

Max wire diameter: 331

Spring Fittings 6"S MAS0317

Single thread for LH / RH wound springs

Max wire diameter: 437.5

Spring Fittings 3"3/4U MAS0317

Universal thread

Max wire diameter: 406.2

Cable Sleeve MAS0060

Aluminum 2.38mm/3.18mm/4.0mm/5.0mm

Spring Fittings 3"3/4S MAS0317

Single thread for LH / RH wound springs

Max wire diameter: 406

Cable Sleeve MAS0160

Aluminum 2.38mm/3.18mm/4.0mm/5.0mm

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≫ Garage Door Parts

3" Pulley MAS0018.3

Bored for 3/8" bolt

Max Cable diameter: 3/16"

S-hook with Split MAS0042/0043

Thickness:1.5mm

For Extension Spring only

3" Pulley MAS0018.3Y

Bored for 3/8" bolt / Yellow plating

Max Cable diameter: 3/16"

U - fork MAS0041.3

Work with 3" pulley

3/8" Bolt

4" Pulley MAS0018.4

Bored for 3/8" bolt

Max Cable diameter: 1/4"

Extension Spring Bracket MAS0061

Thickness:2.0mm

For Extension Spring only

Flag Bracket MAS0126

Thickness:2.0mm

Length: 460mm
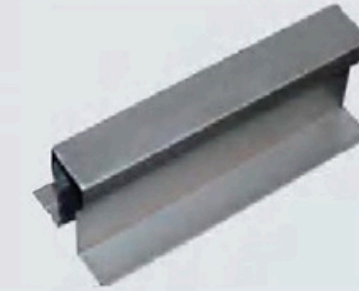
Exterior Reinforce Bar MAS0131

Thickness:1.5mm

For Industrial door use

Corner Angle MAS0046

Thickness:2.5mm

Length: 550mm

2" Track MAS0010.2

Steel thickness: 1.5mm / 1.8mm / 2.0mm

Curve option: R12 / R15

Exterior Reinforce Bar MAS0031

Thickness:1.5mm

For residential door use
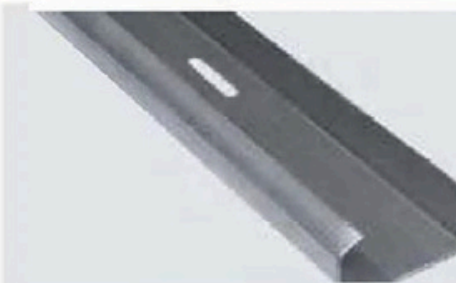
3" Track MAS0310.3

Steel thickness: 2.0mm / 2.5mm

Curve option: R15

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Garage Door Parts

Tube Shaft MAS0024
Thickness: 1.5mm / 1.8mm / 2.0mm
Outside diameter: 1"

Shaft Coupler MAS0532
Casting steel / Length: 65mm
For tube shaft only

Tube Shaft with Keyway MAS0124
Thickness: 2.0mm / 3.0mm
Outside diameter: 1" with 1/4 keyway
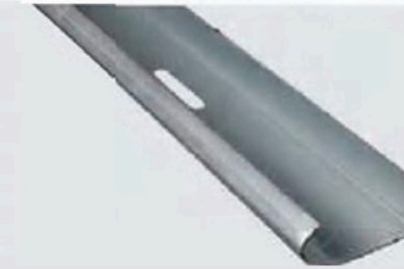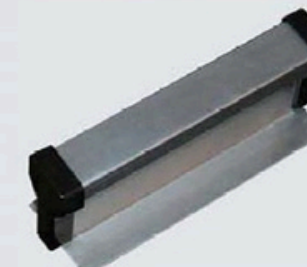
Shaft Coupler MAS0032
Aluminum / Length: 75mm
For tube shaft with keyway

Solid Shaft with Keyway MAS0224
Outside diameter: 1" with 1/4 keyway

Shaft Coupler MAS0332
Aluminum / Length: 70/90mm
For tube shaft with keyway

Shaft Coupler MAS0132
1" bore with 1/4 keyway
For shaft with keyway

Push Spring MAS0533.15
Total Length: 15"
6" Compression

Shaft Coupler MAS0432
1" bore with 1/4 keyway
For solid shaft
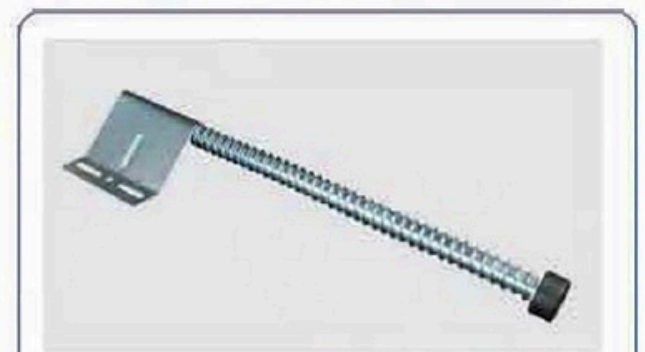
Push Spring MAS0533.27
Total Length: 27"
15" Compression

Straight Shaft Key MAS0035
Length: 75mm / 100mm

Cable MAS0120
7X7 / 7x19
2.38mm / 3.18 mm / 4mm / 5mm

Builder Solution US

Garage Door Parts

Aluminum Cap MAS0062
For 40mm section panel only
White coated

Aluminum Cap MAS3228
For 50mm section panel only
Match with MAS0129 rubber seal

Aluminum Bottom Seal MAS0028
For 40mm section panel only
Anodized only

Bottom Rubber Seal MAS0029.6
Material: EPDM
Width: 65mm

Aluminum Bottom Seal MAS0128
For 40mm section panel only
For bottom or top panel use

Bottom Rubber Seal MAS0229.17
Material: EPDM
Width: 170mm

Bottom Seal MAS0129
Material: EPDM
Work with Airbag

Side Seal MAS0230
Material: PVC
Work with L profile support only

Side Seal MAS0030
Material: PVC

Top Seal MAS0244
Material: EPDM
Work with SF40S panel only

Side Seal MAS0130
Material: PVC

Side Seal MAS0430
Material: PVC / MBS

Builder Solution US

>>Garage Door Parts

Emergency Lock MAS0021
With 2mm Cables
For Electrical operation only

Manual Lock MAS0222
Multifunctional, Including Cylinder, Handle, Cables, Autolatches and swivel

Emergency Lock MAS0121
With 2mm Cables, with Lock cap
For Electrical opeation only

Slide Lock MAS0523
Thtckness: 2mm I 4mm
Dlstance: 102mm

T -type Manual Lock MAS0122
Shaft· 5/16' sqore x 4�

Slide Lock MAS0623
Thickness:2mm $14mm$

Swivel Latch MAS0038
Thickness 2mm

Passing Door Lock MAS0322
For :;;ectional door passing door only

Auto Latch MAS0039
Thickness· 2 5mm 12.75mm

Door Closer MAS0049
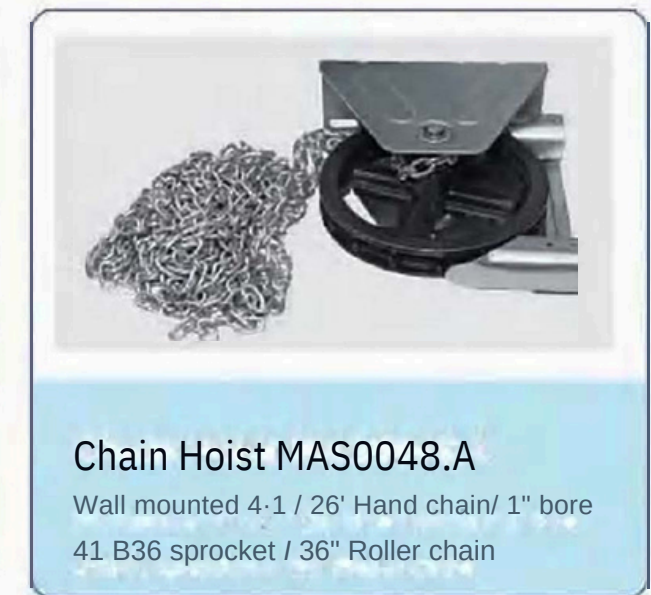Aluminum alloy
For residential and industrial use

Autolatch Striker MAS0040
Thickness· 2.0mm I Width 60mm
Hofe: 7x61 mm

Builder Solution US

Garage Door Parts

Steel Handle MAS0509

Mounting hole 5"1/2 on centers

Lifting Handle MAS0209

Material: Plastic
Black color

Steel Handle MAS0609

Mounting hole 5"1/2 on centers

Lifting Handle MAS0109

Material: Plastic
For Inside and outside

Lifting Handle MAS0009

Material: Plastic
VVhite color. Embedded

Lifting Handle MAS0909

For industrial use
Embedded

Angle Iron MAS0045

Thickness· 2.0mm/ 30x30
Standard Length: 1500mm

Chain Hoist MAS0048.A

Wall mounted 4·1 / 26' Hand chain/ 1" bore
41 B36 sprocket / 36" Roller chain

Angle Iron MAS0245

Thickness:2.0mm / 30x30
Standard Length: 1500m

Chain Hoist MAS0048.B

Wall mounted 6.6:1 / 26' Hand chain/ 1" bore
41 B60 sprocket / 48" Roller chain

Angle Iron MAS0145.B

Thickness:2.0mm / 30x60
Standard Length: 1500mm

Chin Hoist MAS0448

Shaft mounted 4: 1 / 26' Hand chain/ 1" bore
41 B60 sprocket / 22" Roller chain

Garage Door Parts

Extension Spring

Antirust oil

Torsion Spring

Oil - Tempered

Wire diameter: 5.0 - 11.5mm

Torsion Spring

Antirust oil

Wire Diameter: 5.0 - 11.5mm

Torsion Spring

Dacromet coating

Wire diameter: 5.0 - 11.5mm

Torsion Spring

Electrophoresis coating

Wire Diameter: 5.0 - 11.5mm

Torsion Spring Filler

For 1" shaft only

Self Drilling Screw

Hexagon Flange

For PU foamed sectional panel only

Carriage Bolt with Nut

M8 X 16

For track assembly

Tapping Screw

Hexagon Flange

For Wood door panel only

Hex Head Bolt with Nut

M8 X 20

For track assembly

Carriage Bolt with Nut

M6 X 12

For track assembly

Wood Screw

Hexagon Flange

For track fixing

Builder Solution US

Garage Door Parts

Coach Screw

M6 x 90

Side Bracket

4mm,For industrial door use

Coach Screw

M8,c-6Q

Gantry Bracket

For 60mm tube only

Wall Plug 4 way

11 "55mm

Builder Solution US