



## FIRE RATED ROLLING SHUTTERS

**GANDHI**  
Automations Pvt Ltd

India's **No.1** Entrance Automation & Loading Bay Equipment Company



# EUROPEAN COLLABORATION AND TECHNOLOGY WITH INNOVATIVE AND CREATIVE ENGINEERING FOR MORE THAN 20 YEARS



**Quality & Safety - Our Priority**

Fire Rolling Shutters are tested and approved by Exova Warrington UK in accordance with BS 476: Part 22: 1987 certified.

Gandhi Automations develops and manufactures its products strictly in line with these standards. You are continuously assured safe operation with regular use, assembly and maintenance.

A PARTNER WHO STANDS BY YOUR SIDE

**10 YEARS**

**GUARANTEED AVAILABILITY**



ORIGINAL SPARE PARTS  
Guaranteed original spare parts availability for 10 years

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# Efficiency, Safety and Flexibility



Gandhi Automations Pvt Ltd is India's No.1 Entrance Automation and Loading Bay Equipment Company. This widely recognized position has been achieved over years of hard work, innovation, commitment to quality and reliable customer service. Since 1996 we have been designing, manufacturing, exporting and installing products that are problem free, safe and easy to operate.

## Head Office

Headquartered in Mumbai; the commercial capital of India, the company has expanded its manufacturing capacity, operations, geographical reach and customer base globally. Today our products are marketed by us our distributors in more than 70 countries across the globe.



## Competent Advice

Proper customer guidance and service are our top priorities. Our well trained and experienced specialists are always at your disposal from the project planning stage to final building inspection. They help you to choose a perfect product solution tailored to your requirements.

## Quality Management

The company is certified to ISO 9001 : 2015, ISO 14001 : 2015, BS OHSAS 18001 : 2007 by TÜV Nord. This has resulted in the implementation of continuous improvement in personnel training, production, equipment calibration, machinery maintenance, logistics and customer relations.

## Nationwide Network

Ahmedabad	■	Coimbatore	■	Kolkata	■	Raipur	■
Bengaluru	■	Goa	■	Lucknow	■	Ranchi	■
Bhopal	■	Hyderabad	■	Mangalore	■	Surat	■
Bhubaneswar	■	Indore	■	Nagpur	■	Vadodara	■
Chandigarh	■	Jaipur	■	New Delhi	■	Visakhapatnam	■
Chennai	■	Kochi	■	Pune	■		



## Advance Manufacturing

Our strategically located state of the art manufacturing and warehousing facility of 3,00,000 sq. ft. near Bhiwandi (40km NE of Mumbai) ensures high-quality products and short delivery times.

In-house research and development is the vital element within innovative & creative engineering of Gandhi Automations.

All essential product components and control technology are designed and produced by Gandhi Automations with European collaboration and technology.

Our product engineering team uses the latest software combined with technologically advanced machinery to offer our customers an excellent engineered product.



## Packaging

Special care is taken while packaging our products for dispatch to the installation sites. Each consignment is supervised by a team of experts who ensure that material is dispatched efficiently and promptly.

## Install, Commissioning & Service

Our team of committed and diligent engineers and technicians; many of whom are trained at advanced training centers in Europe to ensure perfect installation and trouble-free commissioning according to our specifications assuring product reliability and longevity.



## Dynamic Customer Service

Our Customer Care team offers 24x7 service. We lay great emphasis on exceptional aftersales service and provide Spares, Preventive Maintenance and Annual Maintenance Contracts for minimum downtime ensuring durability and drive maximum ROI.

Our widespread service network assures response time to a minimum.

In rare case of any product failure, all you need to do is reach for the telephone.



**TOLL FREE**

**1800 209 0200**

From Anywhere in India

One call and one of our highly trained service technicians will be on its way in a fully equipped customer service van with wide range of original spares.

# Fire Rated Rolling Shutters - Fire Warrior

BS certified





Fire Rated Rolling Shutters are rated physical fire barriers that protect wall openings from the spread of fire and are designed to close automatically in the event of fire or an alarmed event. Automatic closure will be thermally controlled by means of fusible link.

Motorised Fire Rated Rolling Shutter is tested & approved by Exova Warrington UK which comply with BS 476: Part 22: 1987 standards for stability and integrity for up to 4 hours.

Application includes industrial, commercial, institutional and retail projects where fire protection is required.

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### **Curtain**

Fire Warrior curtain is constructed from 79 mm cold rolled Galvalume / Galvanised Steel / Stainless Steel laths with a minimum thickness of 0.9 mm. The interlocked profiles are securely held using specially designed profile ends which act as a curtain alignment system thus eliminating lateral movement of the profiles.

### **Side Guides**

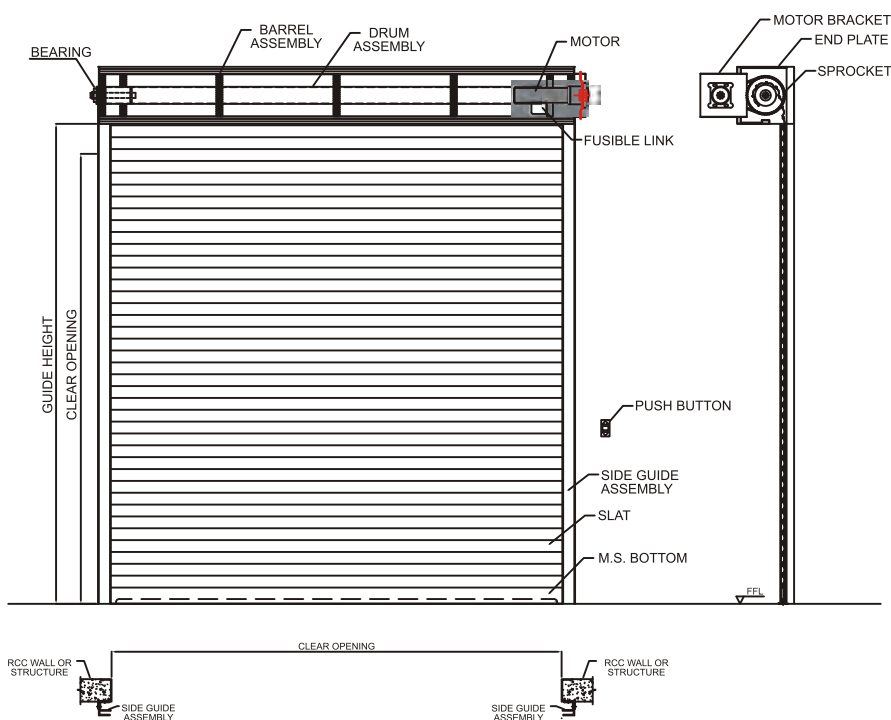
Mild Steel angles of suitable size and thickness are bolted with support angles to support the guides to form a secure fix in the RCC / Steel structure.

### **Bottom Rail**

Formed from Mild Steel flat bar and angle depending on door width, welded back through a centrally located Galvanised Steel flat plate.

### **Barrel Assembly**

The roller barrel is manufactured from Mild Steel tube of suitable outside diameter and wall thickness to suit the shutter application and is un-sprung.



### Barrel Bracket Plate

Suitable design of thickness 4mm. Fitted with suitable anchor fasteners for fixing to the RCC / steel structure.

### Hood

0.9mm thick pressed Galvalume / Galvanised Steel hood box complete with reinforced bracket as required to suit the shutter width.

### Shutter Operation

Electrically operated: Shutters are fitted with a geared motor complete with a push button station with “UP”, “DOWN” and “STOP” buttons.

### Auto - Closing Mechanism

All Fire Shutters are equipped with fusible link mechanism. Upon sensing a temperature of 74°C, the fusible link mechanism releases the brake of the motor and allows it to descend by gravity. Where Fire Shutters are needed to be activated by fire alarm signal, a dual fusible link (electric solenoid releaser) is used which releases the brake of the motor, upon receipt of a 24VDC, 400mA fire alarm signal. A reset pull is provided to reapply the brake on the motor.

### Accessories

- Auto reset solenoid with fusible link
- Polyurethane painted in RAL Colours
- Audio visual fire control panels which can be connected to photo beams, smoke and heat detectors. Allowing full control over how the shutter will descent in fire condition

### Technical Details of Operator

Description		GAPL FRS1P-600	GAPL FRS1P-1000	GAPL FRS3P-1500	GAPL FRS3P-2000
Rated output torque	Nm	412	809	1617	2450
Rated output speed	r/min	4.8	3.5	5.2	3.6
Motor power	W	370	400	1000	1000
Rated voltage	V/Hz	220/50	220/50	380/50	380/50
Rated current	A	3.3	4.9	3.8	4.1
Continuous working time	Min	8	8	13	13
Maximum lifting	kg	600	1000	1500	2000



# Fire Shutter Test



Before the test



60 minutes of test



120 minutes of test



180 minutes of test



240 minutes of test



270 minutes of test - end of test



ISO 9001 : 2015, ISO 14001 : 2015  
BS OHSAS 18001 : 2007

Gandhi Automations operates a policy of continuous development and reserves the right to make appropriate technical modifications / replacements without prior notice.

# GANDHI

Automations Pvt Ltd

**India's No.1 Entrance Automation & Loading Bay Equipment Company**

**CORPORATE OFFICE**

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# PRODUCT CATALOGUE



**GANDHI**  
Automations Pvt Ltd

India's **No.1** Entrance Automation & Loading Bay Equipment Company

# EUROPEAN COLLABORATION AND TECHNOLOGY WITH INNOVATIVE AND CREATIVE ENGINEERING FOR MORE THAN 20 YEARS



## Quality & Safety - Our Priority

Automation for all our product range are CE certified, manufactured in accordance with

**STANDARDS**  
EN 13241-1:2003+A1:2011  
IS 6248

**DIRECTIVES :** 2006/42/CE  
2004/108/CE

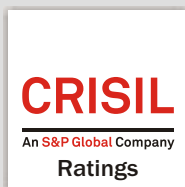
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# Our Quality For Your Safety



Gandhi Automations Pvt Ltd is India's No.1 Entrance Automation & Loading Bay Equipment Company Since 1996, over years of hard work, innovation, commitment to quality and reliable customer service. we have been designing, manufacturing, exporting and installing products that are problem free, safe and easy to operate.

Our comprehensive product portfolio consist of a range of solutions :

High Speed Industrial Doors, Dock Levelers & Dock Shelters, Rolling Shutters, Sectional Overhead Doors, Aircraft Hangar Doors & Shipyard Doors, Gates & Boom Barriers

## Head Office

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The innovations and creative engineering applications of Gandhi Automations is a result of extensive and accurate in-house research and development

All essential product components & accessories as well as control technology units are designed in-house and produced using European collaboration and technology.

Our product engineering team uses latest software combined with advanced machinery to offer our customers an excellent engineered, efficient and finished product.



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# High Speed Doors (Self-Repairing)

CE certified

**SELF - REPAIRING**

Differential  
Air Pressure







Under Pressure



Over Pressure

# Prime Clean Reset

Air Tight Self-Repairing

# High Speed Doors

CE certified



- Clean Room High Speed Doors are designed for internal applications and protects your internal environment against draughts, humidity, dust and dirt.
- Operating speed and superior sealing properties improve traffic flow and provide the required environmental control thus saving on energy costs.
- The doors operate on the concept of low air permeability in pressurized rooms with positive and negative air pressure.
- High door efficiency & low permeability values range as EN 12426 EN 12427 :  $< 12\text{m}^3/\text{m}^2\text{h} \Delta 50 \text{ PA}$ .
- High leak tightness is due to curtain being tightly integrated in special finish side guides.
- Bottom safety edges and inbuilt photo cells combine to ensure operator safety at all times.
- Heavy duty motor : 400V three phase, opening speed upto 2.0 m/s with inverter system.
- Size upto : 4000 mm (W) x 4000 mm (H).

# Prime Reset EE

High Speed Emergency Exit Door

High Speed Doors

CE certified



- Heavy duty automatic self-repairing flexible door featuring evacuation / exit passage within door during emergency.
- Vision windows provided for viewing other side during evacuation.
- Electronic safety device to reverse the door motion when any obstacle is hit.
- 400V Three phase heavy duty motor. Opening speed up to 2.0 m/s with inverter system.
- Stress and wearing on mechanical parts are reduced with start and stop functions, thereby ensuring reliability and long life of the door.
- IP65 electronic panel complete with Open-Close-Emergency Stop push buttons and self-test function.
- Resistance to wind load according to EN 12424 Class 1.
- Size upto : 6000 mm (W) x 6000 mm (H).



# Prime Reset

Self - Repairing

# High Speed Doors

CE certified



- Heavy duty automatic flexible door featuring special and innovative self-repairing system; incase the curtain accidentally gets dislodged, can be recovered with a simple opening and closing operation.
- Full size flexible curtain is made of self-extinguishing polyester, with no horizontal strengthening parts, which slides inside the side hinges.
- Electronic safety device to reverse motion when door is closing if an obstacle is hit.
- Heavy duty motor : 400V three phase, opening speed upto 2.0 m/s with inverter system.
- The start and soft stop facilities avoid mechanical parts stress and wear, thus ensuring reliability and long life of the door.
- IP65 electronic panel complete with open-close-emergency stop push button unit and self-test function.
- Resistance to wind load according to EN 12424 Class 3.
- Size upto : 6000 mm (W) x 6000 mm (H).
- Great Sealing against dirt, dust , humidity etc.

# Prime Food

Smart, Heavy and Water Protected

# High Speed Doors

CE certified



- Designed to meet the specifications and stringent hygiene requirements for applications in the food industry.
- Easy to clean, disinfect and prevent dirt from collecting to maintain hygiene in production areas.
- Resistance to spray water and insensitive to cleaning agents.
- Doors provided with efficient seals to prevent ingress of vermin and other contamination.
- All structural components that may come into contact with water are either made of Stainless Steel or have a corrosion-proof finish.
- FDA approved Polystone® M-Natural guides available as standard for environments that demands rigorous cleaning routines.
- Integrated motorisation for very heavy duty use : 400V three phase, opening speed upto 2.0 m/s.
- Size upto : 4500 mm (W) x 4500 mm (H).



# Prime Freezer

Deep Freezer Door

# High Speed Doors

CE certified



- Designed specifically to provide a perfect solution where temperature control is critical and safety concerns are at a premium.
- The high operating speed combined with superior sealing and optimizes the internal traffic flow and provides energy savings.
- Internal heating system provided within the guide prevents ice formation even during intensive cooling.
- Suitable for both positive and negative temperature, operating temperature range : +5 to -35° C.
- Special double curtain construction with insulation.
- Innovative insulated curtain with high thermal efficiency is available optionally, for additional saving on energy costs.
- Revolutionary soft bottom edge and sensor combine to ensure operator safety at all times.
- Heavy duty motor : 400V three phase, opening speed upto 2.5 m/s with inverter system.
- Size upto : 4500 mm (W) x 5000 mm (H).

# Prime Freezer Duo

Double Curtain Door for Low Temperature

## High Speed Doors

CE certified



- Innovative dual curtain technology that simultaneously opens and closes operation with blower / dryer.
- Dual curtain aids in isolating the freezer area from other area thus reducing convection.
- Partial and full openings are available to minimize convection and energy losses through operation of Freezer Door.
- Suitable for temperature range between +5°C to -35°C.
- Prime Freezer Duo High Speed Doors are self-repairing, the door curtain resets in case it comes out of the guide due to accidents like an impact with a forklift.
- Galvanized Steel guides incorporated with heating elements prevent ice formation during intensive cooling. Stainless Steel & Aluminium Guides are available on request.
- Heavy duty motor : 400V three phase, opening speed upto 2.5 m/s with inverter system.
- Size upto : 4500 mm (W) x 5000 mm (H).
- Bottom safety is ensured by proximity sensors to avoid abrupt landings.



# High Speed Doors

CE certified







- Internal door designed for safe and continuous operations, also creates proper partition between different departments / operations.
- Galvanised steel structure as standard, aluminium or Stainless Steel matt finish structure which integrates traction unit, rapid wirings and safety photocells.
- Flexible curtain in self-extinguishing material complete with anodised Aluminium extrusions for holding the interchangeable modular sections.
- Interchangeable modular sections allow easy arrangement of differently coloured and transparent panels, as well as easy replacement in case of accidental damage.
- Integrated motorisation for very heavy duty use : 400V three phase, opening speed upto 2.0 m/s with inverter system.
- IP65 electronic panel complete with open-close-emergency stop push button unit and self-test function.
- Resistance to wind load according to EN 12424 Class 2.
- Size upto : 6000 mm (W) x 6000 mm (H).



# Prime Plus

Sturdy and Safe

# High Speed Doors

CE certified



- External door engineered for any industrial application.
- Fast, reliable and energy efficient during strong drafts.
- Galvanised Steel structure as standard, Stainless Steel matt finish structure which integrates traction unit, rapid wirings and safety photocells.
- Reinforced flexible curtain in self-extinguishing material.
- Spring steel wind locks in curtain pocket, with side twin rollers, ensures silent door travel, higher wind loads and curtain stability.
- Integrated motorisation for very heavy duty use : 400V three phase, opening speed upto 2.0 m/s with inverter system.
- IP65 electronic panel complete with open-close-emergency stop push button unit and self-test function.
- Resistance to wind load according to EN 12424 Class 3/4.
- Size upto : 10000 mm (W) x 7000 mm (H).

# Prime King

Oversized Design For Large Openings

# High Speed Doors

CE certified



- Unique folding design and strong lifting belts, constructed of polyester, wear and traction-resistant can operate in the most diverse situations even in windy conditions.
- Galvanised Steel structure as standard, Stainless Steel structure which integrates traction unit, rapid wirings and safety photocells.
- Reinforced flexible curtain in self-extinguishing material fitted with strong tubes to ensure proper door functioning in large openings and wind exposed areas.
- Integrated motorisation for very heavy duty use : 400V three phase, opening speed upto 2.0 m/s.
- Simple, functional control panel with open-close-emergency stop push button unit and self-test function.
- Resistance to wind load according to EN 12424 Class 2/3.
- Size upto : 15000 mm (W) x 10000 mm (H).
- Larger sizes available on special request.





- Specially developed to work in combination with the conveyor system for continuous operation.
- Installed between operating sections and storage areas within the conveyor system, helps to save energy and reduce draughts and noise level.
- Galvanised Steel structure as standard, Aluminium or Stainless Steel structure which integrates traction unit and rapid wirings.
- Flexible curtain in self-extinguishing material complete with anodised Aluminium extrusions for holding the interchangeable sections.
- Modular sections permit easy replacement in case of accidental damage.
- Heavy duty motor : 400V three phase, opening speed upto 2.0 m/s with inverter system.
- Advance control device, with option of integration with PLC system.
- Size upto : 4000 mm (W) x 4000 mm (H).

# Prime Machine

Safeguarding Man and Machine

# High Speed Doors

CE certified



- Innovative internal door specifically designed for industrial application where process integration is the challenge and safety to personnel working close to automated manufacturing processes.
- Flexible curtain without rigid element avoids injuries and damages
- Galvanised steel structure as standard, Stainless Steel matt finish structure which integrates traction unit, rapid wirings, safety photocells and safety switches.
- The door can be integrated directly into the control systems of the automated machinery and thus door can open only when the machine is idle and the machine can be operated only when the door is closed.
- Reduced cycle time with fast open and close operation increase product flow and process productivity. Heavy duty motor : 400V three phase, opening speed upto 2.0 m/s with inverter system.
- IP65 electronic panel complete with open-close-emergency stop push button unit and self-test function.
- Size upto : 4000 mm (W) x 4000 mm (H)



# Dock Levelers

CE certified



Built in  
conformity with  
**EN 1398**

# Loading Bay Equipment



## Distinctive Features of Dock Levelers

- Robotically welded platform and lip in almond anti-slip steel.
- Single effect lift cylinder, double effect lip cylinder.
- Safety stop in case of accidental departure of the vehicle. Maximum pressure valve.
- Various sizes of rubber bumpers available.
- Side foot protection steel guards.
- Lip support in resting position to prevent any cutting or overwhelm.
- Yellow / black side strips to evidence possible steps when the Dock Leveler is in use or underneath the dock.
- Sturdy integral maintenance strut to support the platform during maintenance checks.
- Auto adjust alignment in case of uneven leveling.



# Radius Lip Dock Levelers

CE certified

# Loading Bay Equipment



- Radius Lip Dock Levelers aids in adjusting the height of the bay area as per the Vehicle. The Lip helps in bridging the gap between the facility and the vehicle.
- It enables a forklift or pallet truck to drive through on and off the vehicle with the material.
- CE European Certification.
- The self-cleaning lip hinging system does not retain rubbish with automatic end-of-run, so as to keep the 25 mm security distance between the folded lip and structure as per EN1398 & EN 349.
- Built in conformity with EN 1398. Robotically welded platform and lip in anti-slip steel.

\*Standard dimensions in mm of the BASE types, 6t point load (15t evenly distributed) or MAXI 9t point load (22t evenly distributed).

Model	Platform width	Platform length	Lip length	Pit width	Pit height
RDL 2025	2000	2500	410	2040	550
RDL 2030	2000	3000	410	2040	550
RDL 2035	2000	3500	410	2040	550
RDL 2040	2000	4000	410	2040	550
RDL 2045	2000	4500	410	2140	550
RDL 2225	2200	2500	410	2240	550
RDL 2230	2200	3000	410	2240	550
RDL 2235	2200	3500	410	2240	550
RDL 2240	2200	4000	410	2240	550
RDL 2245	2200	4500	410	2240	550

\*Other dimensions available on request.





- Telescopic Lip Dock Levelers have a moveable telescopic lip, which provide a larger contact area between vehicle bed and dock leveler.
- Telescopic Lip Dock Levelers are ideal for connecting vehicles unable to drive near dock i.e. sea containers, side loading railway wagons etc.
- CE European Certification.
- The truck can be loaded right upto the very last centimeter as the telescopic lip can be positioned with pinpoint accuracy.
- Telescopic Dock Levelers are capable to extend its lip upto 1 m.
- Built in conformity with EN 1398. Robotically welded platform and lip in anti-slip steel.

\*Standard dimensions in mm of the BASE types, 6t point load (15t evenly distributed).

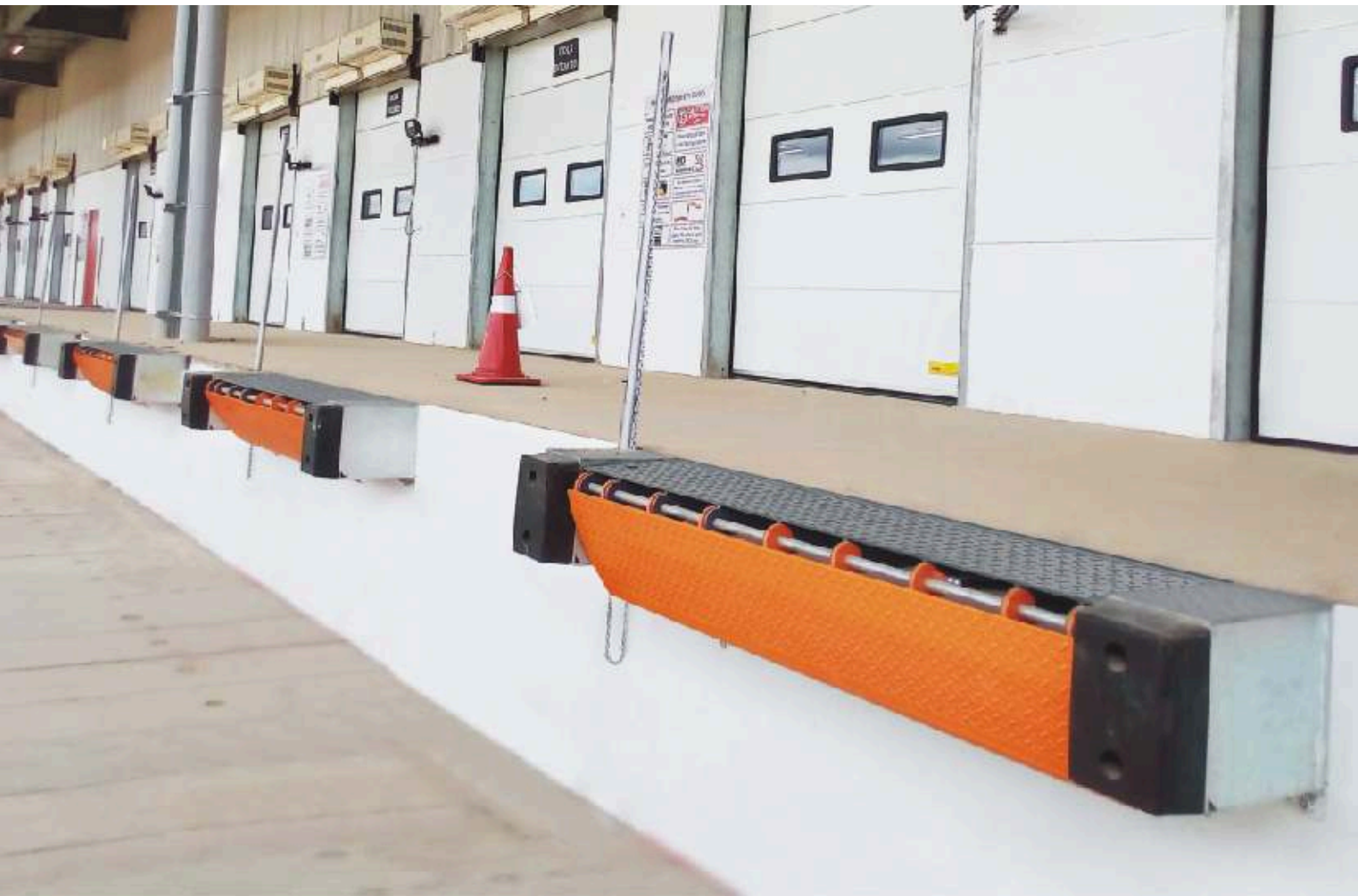
Model	Platform width	Platform length	Lip length	Pit width	Pit height
TDL 2025	2000	2500	500 - 1000	2040	550
TDL 2030	2000	3000	500 - 1000	2040	550
TDL 2035	2000	3500	500 - 1000	2040	550
TDL 2040	2000	4000	500 - 1000	2040	550
TDL 2045	2000	4500	500 - 1000	2140	550
TDL 2225	2200	2500	500 - 1000	2240	550
TDL 2230	2200	3000	500 - 1000	2240	550
TDL 2235	2200	3500	500 - 1000	2240	550
TDL 2240	2200	4000	500 - 1000	2240	550
TDL 2245	2200	4500	500 - 1000	2240	550

\*The dimensions are nominal only. The technical drawings, supplied on demand, are to be considered valid for installation and operation.

# Edge-of-Dock Levelers

for special requirement

# Loading Bay Equipment



- Edge-of-Dock Levelers are low cost yet high performing solutions for applications that have standard or little variance in truck bed heights at loading dock.
- It is ideally suited where pit leveler installation is not feasible.
- Edge-of-Dock Leveler is developed in compliance with the latest European safety standard, EN 1398. It has a capacity of 6000kg and is suitable for use with all types of loading equipment from manual pallet trucks to fork trucks. Robotically welded platform and lip in anti-slip steel.
- The open hinge lip construction, carries a lifetime guarantee & has a solid welded connection between the lip plate & the beams under the deck to ensure the lip angle of 7.5° is maintained. This is extremely important when loading / unloading vehicles with bed heights above Dock Leveler, to ensure that the lip always lays flat on the vehicle floor to avoid the tripping hazard.
- Edge-of-Dock Leveler platform is mounted to the edge of a building wall to assist loading & unloading in a limited working range of 100mm above dock and 100mm below dock.

Model	Total width	Platform width	Total length	Lip range beyond bumpers	Bumper projection	Working range above dock	Working range below dock
EOD-72 HP	2255 mm	1830 mm	700 mm	245 mm	455 mm	100 mm	100 mm
EOD-2000 HP	2425 mm	2000 mm	700 mm	245 mm	455 mm	100 mm	100 mm

N.B.: The 'HP' (high profile) model is suitable for forklifts or high clearance ride-on trucks.



- The Retractable PVC front panels Dock Shelter is the most popular & used.
- Available for dock level installation, or for ground level installation for the protection of doors without dock.
- The front panels are made of high resistance black PVC reinforced with double weaving of polyester that works like spring in order to seal the vehicles of different shapes.
- Side and top panels are of standard yellow PVC, bright at the inside with the day light, inset into the throats of the perimeter frame.
- Retractable steel framework is supplied with hinged arms to provide a shelter which if struck by misaligned vehicle easily retracts behind the bumper face without any damage to the shelters.





- Inflatable Dock Shelters are elastomeric tubes designed to round out gaps with the introduction of a medium (usually air) to form a tight barrier between a mounting and striking surface. This helps in sealing any air gaps.
- Inflatable Shelters provide the most versatile seal available to service the widest variety of truck and trailer configurations.
- Contrary to other types of Dock Shelters, the vehicle does not push towards the shelter.
- Instead the shelter is inflated around the docked vehicle providing complete seaming.
- The cushions retract rapidly to their rest position when the fan is switched off to let the vehicle go.
- Use of fixed wheel guides is strongly recommended to ensure correct alignment of the vehicle when reversing against the Dock Seal.



- Thanks to its high insulation factor, the Cushion Dock Shelter is an ideal solution for controlled temperatures.
- The three cushions are made of elastic polyurethane foam, covered with PVC coated polyester fabric, supporting vehicle pressures and perfectly sealing the three sides, including the space between opened rear doors and sides of the vehicle.
- The two vertical cushions have continuous overlap of anti-friction limpets allowing for the up and down heavy friction of the vehicle on its suspensions, during the loading.
- Bold guidance markings at the front of the seal side cushions are useful point of orientation when reversing onto the Dock Seal.
- It is available with fixed or adjustable horizontal top cushion, adjustable to different vehicle heights.





- Porto doors are built to ensure the highest ease and flexibility of use, which also allows quick, hassle free and accurate replacement of old doors.
- Porto door design is optimal who need robust, well-insulated and space saving door in compliance with safety requirements.
- The Panels are sturdy and consist of double-skinned pre-painted Galvanized Steel, thickness 40 mm. The door panels are available in two heights 500 mm and 610 mm. They are connected with each other by Galvanised Steel hinges. This guarantees safety and durability.
- The core insulated with high-density ( $45 \text{ kg/m}^3$ ), CFC-free polyurethane foam offers high protection from outside temperatures and soundproofing as well as great sealing effect.
- Reliable, safe, easy and low noise operation.
- Our Sectional Doors fit openings to a maximum width of 15,000 mm and height of 10,000 mm. Future developments and continuous improvement of existing systems are our standard procedure.



- MaxVista is a Sectional Overhead Door designed to be combined with thermally insulated panels and extruded Aluminium panels, shaped for inserting transparent acrylic, gridded or meshed windows.
- This combination gives the door a very distinctive look, which enhances the face of both commercial and industrial buildings, where MaxVista blends in perfectly as a practical and decorative feature and improved vision.
- It makes the environment light and pleasant to work in as it allows natural light to go through the large clear area.
- The Aluminium profiles and the glass window sections are highly resistant to the elements and ensure a longer life of the door.
- For easy access for people and small transport vehicles, a separate threshold-free side door or an integrated pedestrian door, provide access even when the Sectional Door is closed.
- The heat loss is saved from the building by decrease in the number of times the door is operated making it energy efficient.



# Rolling Shutters - Quality Engineered





# Rolling Shutters



Gandhi Rolling Shutters are ideal for situations where side room is at a premium and security is required. Our Rolling Shutters require very little headroom above the structural opening. They combine strength with elegance along with durability and are designed for both external and internal applications.

Gandhi Rolling Shutters are fabricated of interlocked Galvalume, Galvanised Insulated and Non Insulated, Stainless Steel, Patented Aluminium and Bright Steel Bar Rolling Grills.

Each of our Rolling Shutters is solidly constructed to promote trouble-free operation and long life. The Rolling Shutters can also be designed as per client's specifications or conforming to IS 6248.



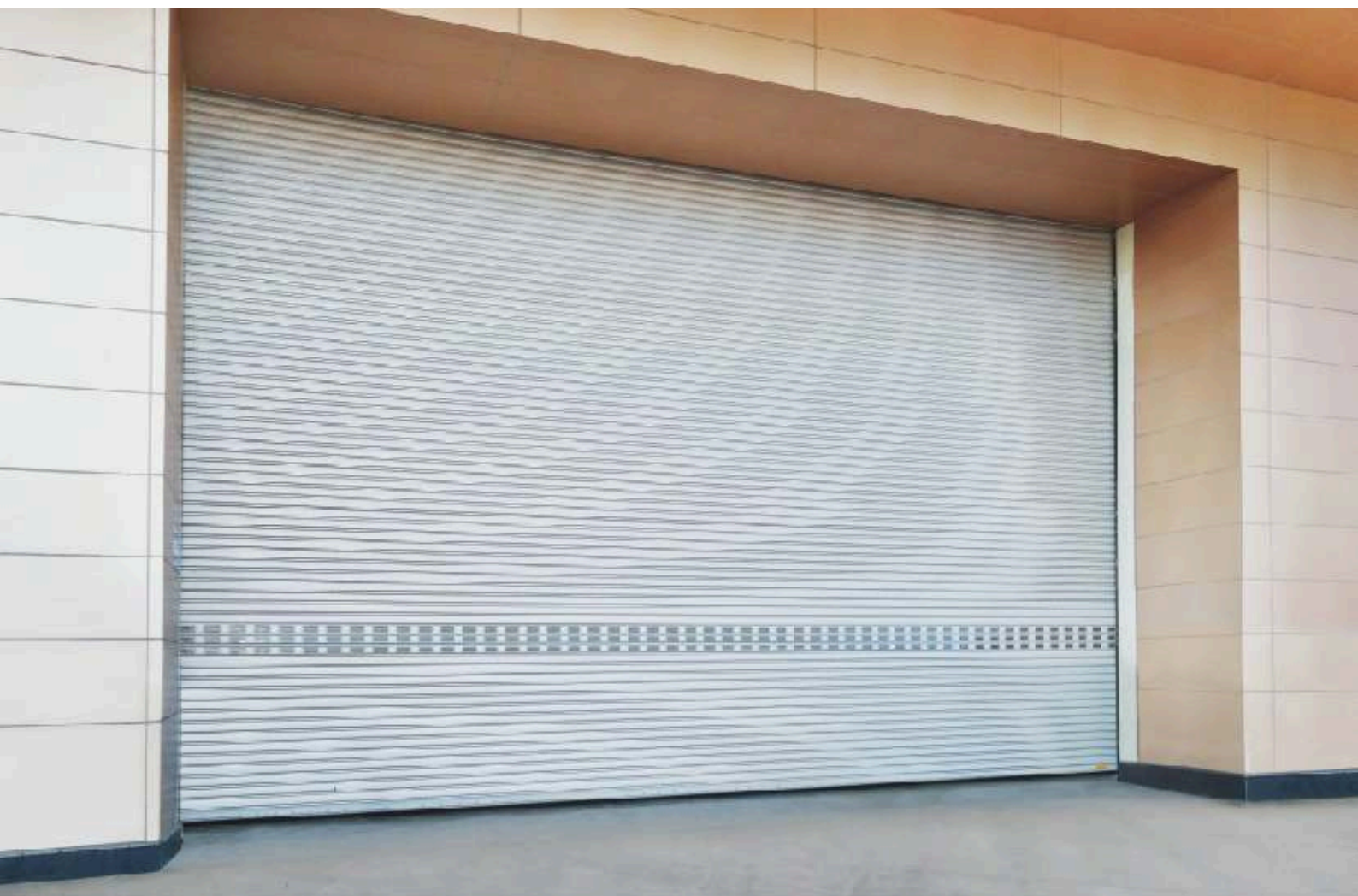


- Galvalume Rolling Shutters are ideally suited for most types of Industrial and Commercial applications.
- The Aluminium-zinc alloy coating offers excellent corrosion resistance. It retains the sacrificial properties of zinc relative to steel while Aluminium provides a tough film of Aluminium oxide to increase barrier protection.
- Galvalume Rolling Shutters continues to gain approval by architects, building owners and many others due to its versatility, ease of use, aesthetics and long-term performance.
- Single-skinned Galvalume Steel without protective paint is standard. On request Galvalume Rolling Shutter is available with protective paint or polyurethane paint in any RAL colour.
- Galvanised Steel is available on special request.



- Galvalume Rolling Shutters with finely perforated profiles helps in achieving visibility, light infiltration and ventilation.
- Used extensively in shopping malls, garages and high street retail premises, perforated roller shutters present a most economical method of providing a secure closure to large or small openings.
- Rolling Shutters can either be fabricated entirely of perforated profiles or these special profiles can be selectively used to provide partial visibility.
- Single-skinned Galvalume Steel without protective paint is standard. On request Galvalume Rolling Shutter is available with protective paint or polyurethane paint in any RAL colour.
- Galvanised Steel is available on special request.





- Isotherm Rolling Shutters are designed for a variety of industrial, warehouse, loading bays & commercial uses.
- The shutters can be custom made to fit large openings and are ideal for situations where security is required.
- Rolling Shutters with galvanised double-skinned PUF insulated profiles give aesthetically pleasing appearance, ensure good thermal and acoustic insulation with energy efficiency and durability.
- Isotherm Rolling Shutters can be fabricated with Isotherm vista profiles made of Plexi glass double glazing window for visibility.
- The curtain is guided vertically by roll formed Galvanised Steel guides mounted on each side of the Rolling Shutter. The special shaped 'Omega' guides with integrated rubber and brush seals prevent metal-to-metal contact, ensures quiet shutter operation and also provide effective sealing.
- Bend-resistant double-skinned extruded Aluminium profile for additional strength. The bottom rail is fitted with extruded rubber bottom seal that will seal against the floor when the door is fully closed.



- Aluminium Rolling Shutters being corrosion resistant can be installed in areas where it would be exposed daily to atmospheric conditions that cause corrosion.
- Aluminium Rolling Shutters are made of design patented extruded double wall Aluminium profiles provide durability, efficiency and functionality while being light weight.
- Double-skinned Aluminium profile without insulation and protective paint is standard. On request it is available with insulation for oven application or polyurethane painted in any RAL.
- Aluminium side guides with integrated seals ensure quiet shutter operation. Bend-resistant double-skinned extruded Aluminium profile for additional strength and the bottom rail is fitted with extruded rubber bottom seal will seal against the floor when the door is fully closed.





- Stainless Steel Rolling Shutters made of SS304 or SS316 interlocked profiles have a very good corrosion resistance while providing an appealing finish.
- They are capable of withstanding adverse weather conditions, thus providing 100% safety and security.
- Single-skinned SS304 / SS316 steel with matt finish is standard.
- SS304 / SS316 side guides with integrated seals ensure quiet shutter operation. Bend-resistant Stainless Steel bottom profile SS304 / SS316 for additional strength and bottom rail is fitted with rubber bottom seal that will seal against the floor when the door is fully closed.



Honeycomb Rolling Grills

- Rolling Grills of this design is highly suitable for any commercial or industrial application where protection and ventilation are paramount.
- Bend-resistant double-skinned extruded Aluminium profile for additional strength. The bottom rail is fitted with extruded rubber bottom seal that will seal against the floor when the door is fully closed.
- Honeycomb Rolling Grills constructed of Bright Steel Bar are attractively patterned and are ideal for display windows of showrooms, shopping malls and perfectly match with any building's architecture & interior space.
- Rectangular Rolling Grills are constructed of design patented horizontal round polished bar interlinked with vertical Bright Steel polished bar, surface without protective paint as standard. On request polyurethane painted in any RAL is available.
- Operational noise and wear of grills are significantly reduced as galvanised side guides with integrated seals provide optimal sealing.
- Choice of two unique designs catering to all requirements.



Rectangular Rolling Grills



- Fire Rated Rolling Shutters are rated physical fire barriers that protect wall openings from the spread of fire and are designed to close automatically in the event of fire or an alarmed event. Automatic closure will be thermally controlled by means of fusible link.
- Motorised Fire Rated Rolling Shutter is tested & approved by Exova Warrington UK which comply with BS 476: Part 22: 1987 standards for stability and integrity for up to 4 hours.
- Application includes industrial, commercial, institutional and retail projects where fire protection is required.
- Constructed of Galvanised Steel or Stainless Steel in a variety of gauges, profile designs and finishes for unsurpassed strength, durability and style.
- Automatic closing of the shutter in the event of fire detection by means of fusible link activated at 74°C.
- The operating system can be directly wired for activation by fire alarm systems or smoke detectors.



# Fire Shutter Test



Before the test



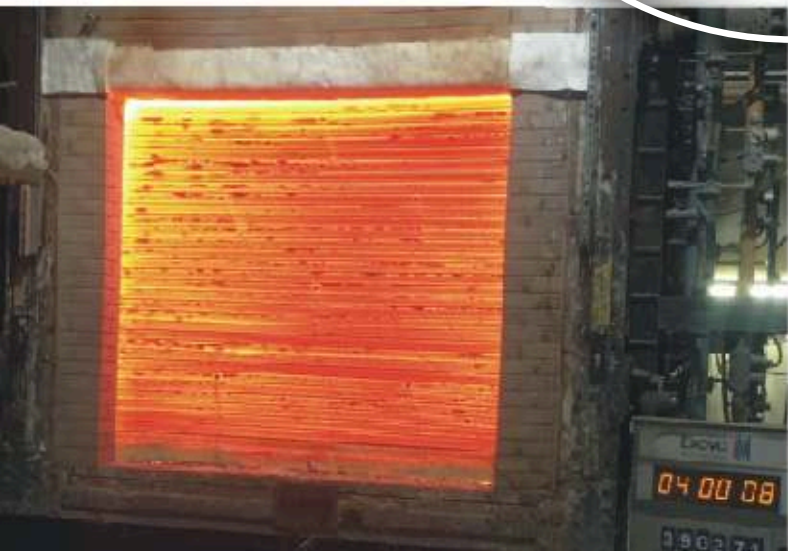
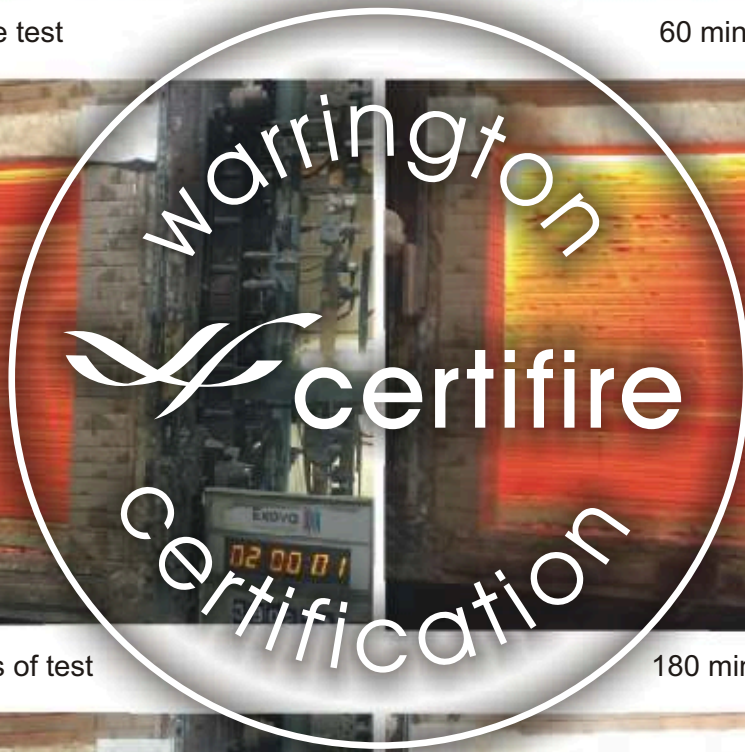
60 minutes of test



120 minutes of test



180 minutes of test



240 minutes of test



270 minutes of test - end of test

# Aircraft Hangar Doors & Shipyard Doors

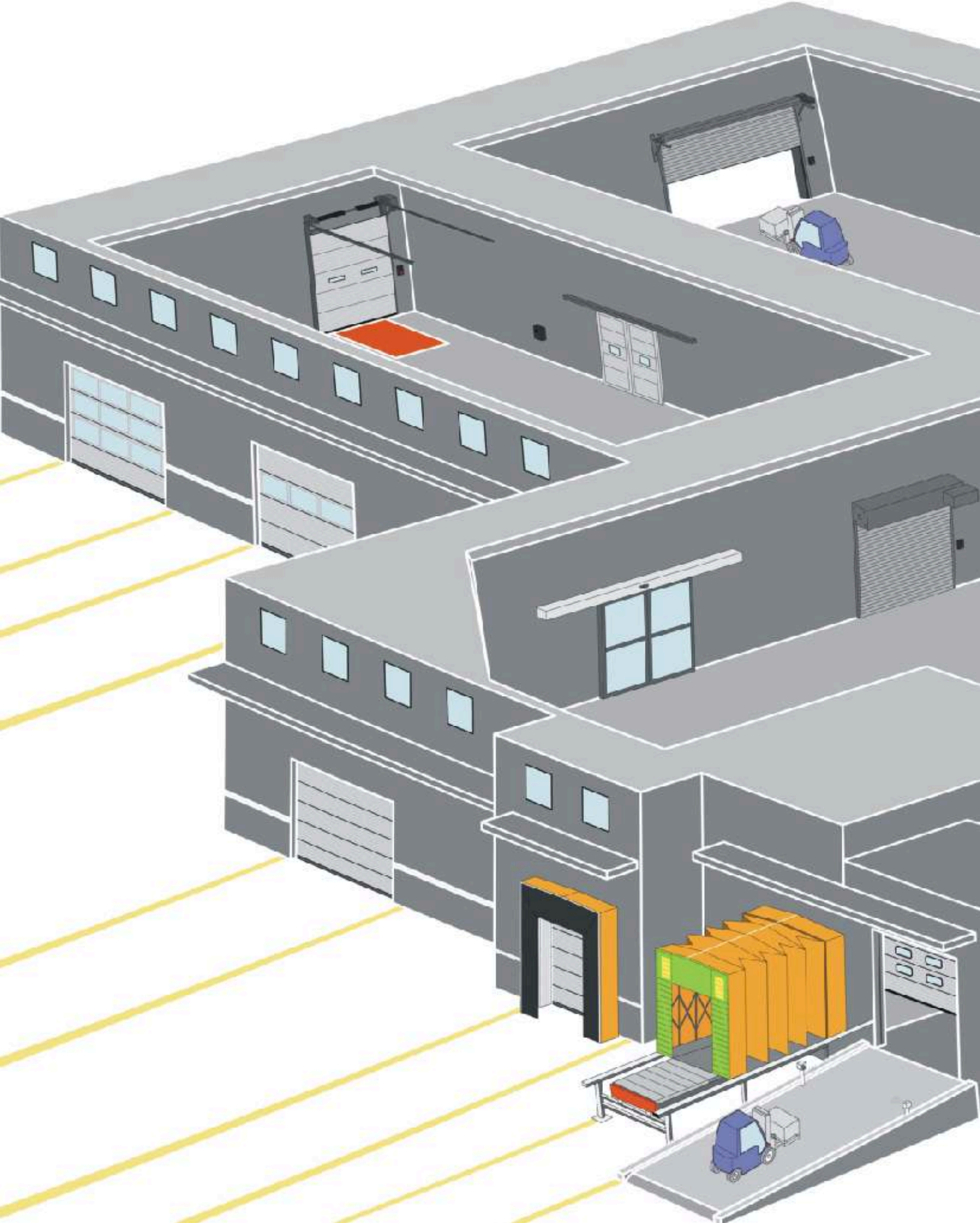


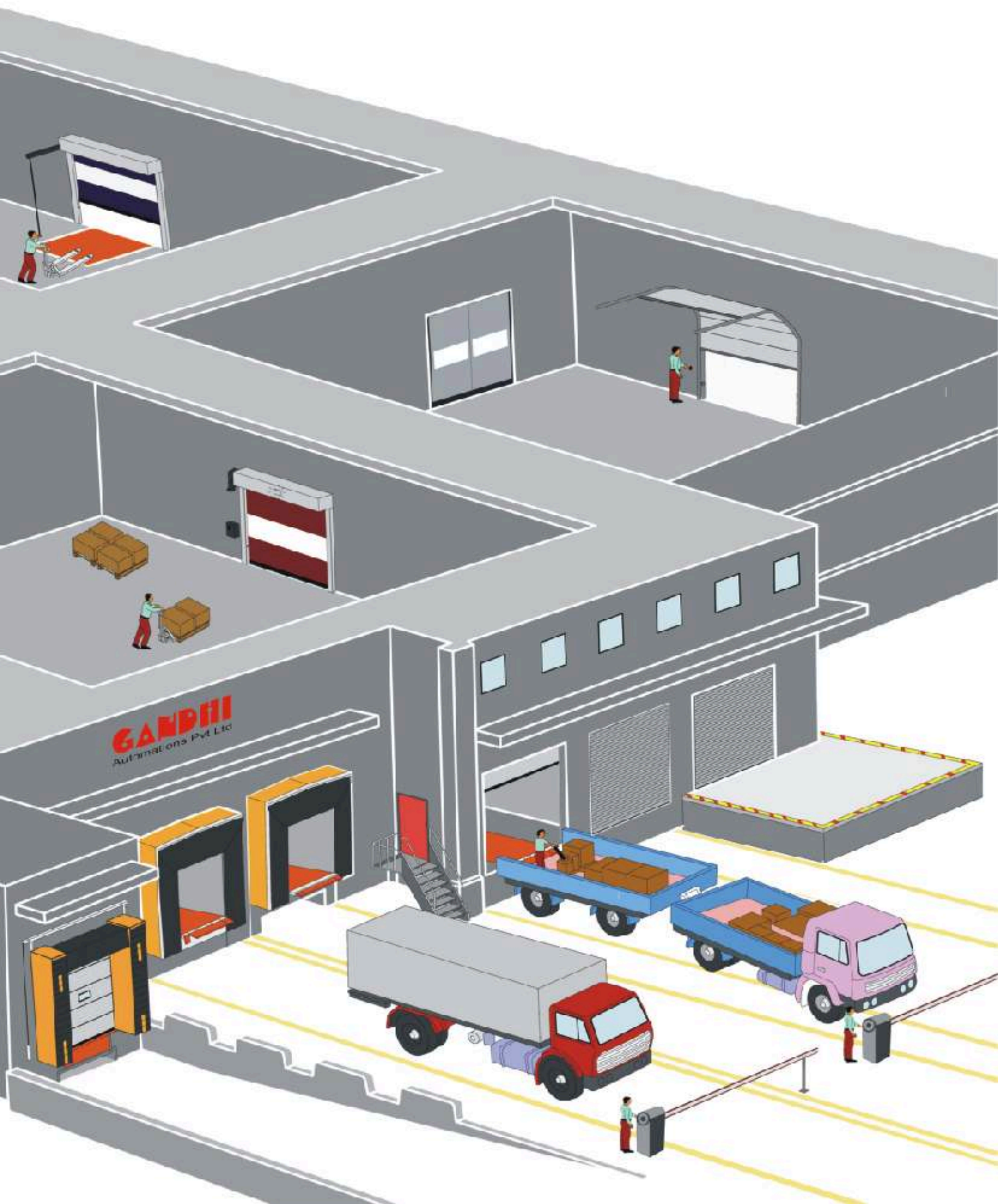
# Hangar Doors

- Extra large upward lifting fabric doors for aircraft hangars are designed to withstand fluctuations in moisture levels & temperature.
- Other applications like shipbuilding, steel mills, mining, aerospace, manufacturing & military facilities.
- Resistant to dirt, rust & resist even in the most violent wind conditions.
- Doors have elevating support posts that are ideal for extra wide & extra high doorways.
- We also have available doors with specialised design to do away with the problems traditionally associated with craneways, paint facilities & sand blasting.
- There is virtually no limit to size of the doors as each door is custom designed & built as per specifications.



One stop solution







Indian Green Building Council  
M E M B E R



ISO 9001 : 2015, ISO 14001 : 2015  
BS OHSAS 18001 : 2007

Gandhi Automations operates a policy of continuous development and reserves the right to make appropriate technical modifications / replacements without prior notice.

# GANDHI

Automations Pvt Ltd

**India's No.1 Entrance Automation & Loading Bay Equipment Company**

**CORPORATE OFFICE**

Chawda Commercial Centre, Link Road, Malad (W), Mumbai-400064, India

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Fax : +91 22 6672 0201

Email : [export@geapl.co.in](mailto:export@geapl.co.in)

Website: [www.geapl.co.in](http://www.geapl.co.in)



## HIGH SPEED DOORS

**GANDHI**  
Automations Pvt Ltd

India's **No.1** Entrance Automation & Loading Bay Equipment Company

# GERMAN COLLABORATION AND TECHNOLOGY WITH INNOVATIVE AND CREATIVE ENGINEERING FOR MORE THAN 20 YEARS



## Quality & Safety - Our Priority

High Speed Doors are CE certified, manufactured in accordance with STANDARD EN 13241-1:2003+A1:2011 DIRECTIVES : 2006/42/CE 2004/108/CE

Gandhi Automations develops and manufactures its products strictly in line with these standards. You are continuously assured safe operation with regular use, assembly and maintenance.

A PARTNER WHO STANDS BY YOUR SIDE

**10 YEARS**  
**GUARANTEED AVAILABILITY**



ORIGINAL SPARE PARTS  
 Guaranteed original spare parts availability for 10 years



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# Efficiency, Safety and Flexibility



Gandhi Automations Pvt Ltd is India's No.1 Entrance Automation and Loading Bay Equipment Company. This widely recognized position has been achieved over years of hard work, innovation, commitment to quality and reliable customer service. Since 1996 we have been designing, manufacturing, exporting and installing products that are problem free, safe and easy to operate.

## Head Office

Headquartered in Mumbai; the commercial capital of India, the company has expanded its manufacturing capacity, operations, geographical reach and customer base globally. Today our products are marketed by us our distributors in more than 70 countries across the globe.



## Competent Advice

Proper customer guidance and service are our top priorities. Our well trained and experienced specialists are always at your disposal from the project planning stage to final building inspection. They help you to choose a perfect product solution tailored to your requirements.

## Quality Management

The company is certified to ISO 9001 : 2015, ISO 14001 : 2015, BS OHSAS 18001 : 2007 by TÜV Nord. This has resulted in the implementation of continuous improvement in personnel training, production, equipment calibration, machinery maintenance, logistics and customer relations.

## Nationwide Network

Ahmedabad	Coimbatore	Kolkata	Raipur
Bengaluru	Goa	Lucknow	Ranchi
Bhopal	Hyderabad	Mangalore	Surat
Bhubaneswar	Indore	Nagpur	Vadodara
Chandigarh	Jaipur	New Delhi	Visakhapatnam
Chennai	Kochi	Pune	



## Advance Manufacturing

Our strategically located state of the art manufacturing and warehousing facility of 3,00,000 sq. ft. near Bhiwandi (40km NE of Mumbai) ensures high-quality products and short delivery times.

In-house research and development is the vital element within innovative & creative engineering of Gandhi Automations.

All essential product components and control technology are designed and produced by Gandhi Automations with European collaboration and technology.

Our product engineering team uses the latest software combined with technologically advanced machinery to offer our customers an excellent engineered product.



## Packaging

Special care is taken while packaging our products for dispatch to the installation sites. Each consignment is supervised by a team of experts who ensure that material is dispatched efficiently and promptly.

## Install, Commissioning & Service

Our team of committed and diligent engineers and technicians; many of whom are trained at advanced training centers in Europe to ensure perfect installation and trouble-free commissioning according to our specifications assuring product reliability and longevity.



## Dynamic Customer Service

Our Customer Care team offers 24x7 service. We lay great emphasis on exceptional aftersales service and provide Spares, Preventive Maintenance and Annual Maintenance Contracts for minimum downtime ensuring durability and drive maximum ROI.

Our widespread service network assures response time to a minimum.

In rare case of any product failure, all you need to do is reach for the telephone.



**TOLL FREE**

**1800 209 0200**

From Anywhere in India

One call and one of our highly trained service technicians will be on its way in a fully equipped customer service van with wide range of original spares.

# High Performance Doors

CE certified





## High Performance Doors - High Speed Doors

High Performance Doors or High Speed Doors aids in thermal efficiency of a building through frequent fast open and close operations. The quintessential benefit of High Speed Door is the ability to control “air flow” compared to an opening of a door when it is not fully closed.

High Speed Doors are also installed for Internal and External applications.

- Intelligent Airlock / Interlock Mechanism is used in cleanroom areas to preserve air quality and prevent outside airborne particulates from entering process areas.
- High Speed Doors with low permeability values are ideal for contamination prevention and strict hygiene environment. Self-repairing doors in these environment minimizes downtime to none as they reset automatically in an event of accident to perform seamless operation.
- Minimal waiting time accelerate the logistic processes enhancing efficiency and aids in controlling temperatures.
- Cold Storage Vehicles require an easy transfer between different zones of temperature and humidity. High Speed Freezer Doors operate between +5 to -35°C in order to best ensure the most comprehensive maintenance of temperature in a refrigerated environment
- High Speed Doors for food and retail businesses meet the minimum requirements of hygiene and protection of unauthorized personnel

# High Speed Doors (Self-Repairing)

CE certified

**SELF - REPAIRING**

Differential  
Air Pressure





**Under Pressure - Over Pressure**



**Soft Bottom Edge**



# Prime Clean Reset

Air Tight Self-Repairing












## Efficient Door

- Designed for use in dust free areas
- Concept of low air permeability in pressurized rooms with positive and negative air pressure
- Self-supporting construction
- Minimizes air leakage
- Special side guides to tightly integrate the curtain
- High leak tightness due to the close fitting curtain in the guide rails
- High door efficiency with a very low permeability values

## Technical Specifications

Door Type		Roll-up
Use	Internal Door	Standard
Door Sizes	Max PL upto	4000 mm
	Max PH upto	4000 mm
Speed	Relay Control Unit As Standard	
	Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s
	Optional Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking	
	Opening Speed upto Closing Speed	2.0 m/s 0.5 m/s
Security Features	EN 13241-1	Standard
Cleanroom Class		ISO Class 5
Resistance to Wind Load	EN 12424	Class 3
Permeability Air	EN 12426 EN 12427	< 12 m <sup>3</sup> /m <sup>2</sup> h Δ 50 PA
Curtain	Fabric	0.9 - 1.5 mm
	Full Transparent PVC	2.0 mm
Side Guide	UHMWPE 1000	Standard
Guide Structure Material / Surface	Aluminium	Standard
	Stainless Steel 304 / 316 matt finish	Optional
Shaft / Operator Cover	Straight	Optional
Operator and Control	Connecting Voltage	400V – 3ph, N
	Open-Stop-Close Button	Standard
	Protection Category (Operator / Control)	IP 54 / IP 65
	Emergency-OFF Button	Optional
	Closing Zone Monitoring	Light Grille IP 67
	External Route Monitoring	Inbuilt Photocell
	Door area Monitoring	Radar Presence Detector Induction Loop
Emergency Opening	Crank Handle	Standard
Optional Curtain Colours	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p> Blue Similar to RAL 5010</p> <p> Yellow Similar to RAL 1021</p> <p> Orange Similar to RAL 2004</p> <p> White Similar to RAL 9003</p> </div> <div style="width: 45%;"> <p> Red Similar to RAL 3002</p> <p> Grey Similar to RAL 7035</p> <p> Green Similar to RAL 6005</p> </div> </div>	

# Prime Reset EE

High Speed Emergency Exit Door



## Fast Exit during Evacuation

- Emergency exit access within the door curtain
- Easy Push-to-Open access during emergency
- Transparent window for visibility and daylight during evacuation
- Durable and low maintenance doors
- Door curtain with flexible material for man and material safety
- Self-repairing door curtain enabling uninterrupted operation

## Technical Specifications

Door Type		Roll-up
Use	Internal Door	Standard
Door Sizes	Max PL upto Max PH upto	6000 mm 6000 mm
Speed	Relay Control Unit As Standard Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s
	Optional Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking Opening Speed upto Closing Speed	2.0 m/s 0.5 m/s
Security Features	EN 13241-1	Standard
Resistance to Wind Load	EN 12424	Class 1
Curtain	Fabric	0.9 - 1.5 mm
	Transparent PVC Section	2.0 mm
Side Guide	UHMWPE 1000	Standard
Guide Structure Material / Surface	Aluminium	Standard
	Galvanised Steel / Stainless Steel 304 / 316 matt finish	Optional
Shaft / Operator Cover	Straight	Optional
Operator and Control	Connecting Voltage	400V – 3ph, N
	Open-Stop-Close Button	Standard
	Protection Category (Operator / Control)	IP 54 / IP 65
	Emergency-OFF Button	Optional
	Closing Zone Monitoring	Light Grille IP 67
	External Route Monitoring	Inbuilt Photocell
	Door area Monitoring	Radar Presence Detector Induction Loop
Electronic Limit Switch	Standard	
Emergency Opening	Crank Handle	Standard
Standard Curtain Colours	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><span style="color: blue;">■</span> Blue Similar to RAL 5010</p> <p><span style="color: yellow;">■</span> Yellow Similar to RAL 1021</p> <p><span style="color: orange;">■</span> Orange Similar to RAL 2004</p> <p><span style="color: white;">■</span> White Similar to RAL 9003</p> </div> <div style="width: 45%;"> <p><span style="color: red;">■</span> Red Similar to RAL 3002</p> <p><span style="color: grey;">■</span> Grey Similar to RAL 7035</p> <p><span style="color: green;">■</span> Green Similar to RAL 6005</p> </div> </div>	

# Prime Reset








Self-Repairing



## Flexible and Self-Repairing Door

- Functional, safe, quick and resistant
- Innovative anti-crash system
- Can be equipped with PVC vision windows
- Self-Lubricating maintenance free guide
- Smooth and silent opening and closing
- Protects traction unit, enables rapid wiring and safety photocell
- Flexible curtain in self-extinguishing material
- Self-resetting without intervention
- Quickly back to operation
- Control panel designed for an intensive continuous service

## Technical Specifications

Door Type		Roll-up	
Use	Internal Door	Standard	
Door Sizes	Max PL upto	6000 mm	
	Max PH upto	6000 mm	
Speed	Relay Control Unit As Standard Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s	
	Optional Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking Opening Speed upto Closing Speed	2.0 m/s 0.5 m/s	
Security Features	EN 13241-1	Standard	
Resistance to Wind Load	EN 12424	Class 3	
Curtain	Fabric	0.9 - 1.5 mm	
	Transparent PVC Section	2.0 mm	
Side Guide	UHMWPE 1000	Standard	
Guide Structure Material / Surface	Aluminium	Standard	
	Galvanised Steel / Stainless Steel 304 / 316 matt finish	Optional	
Shaft / Operator Cover	Straight	Optional	
Operator and Control	Connecting Voltage	400V – 3ph, N	
	Open-Stop-Close Button	Standard	
	Protection Category (Operator / Control)	IP 54 / IP 65	
	Emergency-OFF Button	Optional	
	Closing Zone Monitoring	Light Grille IP 67	
	External Route Monitoring	Inbuilt Photocell	
	Door area Monitoring	Radar Presence Detector	Optional
		Induction Loop	Optional
Electronic Limit Switch		Standard	
Emergency Opening	Crank Handle	Standard	
Standard Curtain Colours	 Blue Similar to RAL 5010	 Red Similar to RAL 3002	
	 Yellow Similar to RAL 1021	 Grey Similar to RAL 7035	
	 Orange Similar to RAL 2004	 Green Similar to RAL 6005	
	 White Similar to RAL 9003		

# Prime Food

Smart, Heavy and Water Protected



Food sector is placed second to pharmaceuticals in adherence to food and safety regulations. Food sector always have to be vigilant of contamination due to multiple causes such as Air inflow, Personal Hygiene, Equipment Hygiene and wash-down properties, etc. Hence, this sector strives to invest into the products that are technologically advanced to meet the perquisites imposed both by the security and hygiene.

Prime Food High Speed Door is the most appropriate solution to offer great speed, versatility and security valuing the safety and hygiene regulations imposed by the authorities such as FDA. This door design has innovative curtain edge that firmly holds the curtain into the side guides. If impacted, the curtain will release from the side guide and automatically reset on the next door cycle as there are no metal parts within the curtain design.

Special flexible curtain in self-extinguishing material provided as standard. On special request, FDA approved white flexible curtain is supplied. Motor cover, corner brackets are designed to meet all strict requirements required by food industry. High speed operation, ultra-tight seal and curtain technology assure outstanding environmental control as well safety for pedestrians and equipment.

### Contamination Control

Specific areas within Food industry must adhere to strict regulations on contamination. Self-repairing doors aids in complying these requirements by minimizing downtime to none as they resets automatically to perform seamless operation ensuring shortest exposure time reducing the risk of airborne contamination.

### Employee and Material Safety

Infrared photocells and a wireless sensing edge reverse the door automatically if an obstruction is detected or contacted. The soft bottom edge curtain is free of heavy, rigid components thus protecting users and equipment from hard edge accidents.

### Wash-down Door

The wash-down is imperative in food-processing facilities to maintain hygiene. An end of the line packaging areas will require very little wash-down. In contrast, the processing section of a food plant may need a thorough wash-down. The type of wash-down will depend on the type of food processed. Cast iron and aluminum corrode in wash-down environments. We provide durable FDA approved Polystone® M-Natural guides especially for wash-down applications. The Door curtain is made of PVC and is compatible for wash-down.



# Prime Food

Smart, Heavy and Water Protected





## When Hygiene is Crucial

- All structural components that may come into contact with water are either made of Stainless Steel or have a corrosion-proof finish
- FDA approved Polystone® M-Natural guides available as standard for environments that demands rigorous cleaning routines
- Self-supporting construction with anti-crash protection system
- Easy to clean & disinfect to maintain hygiene in production areas. Resistance to spray water
- Insensitive to cleaning agent
- Can be equipped with transparent PVC vision windows
- Protects traction unit and enables rapid wiring
- Control device in plastic PVC
- Barrel diameter sensor in the heading

## Technical Specifications

Door Type		Roll-up
Use	Internal Door	Standard
Door Sizes	Max PL upto	4500 mm
	Max PH upto	4500 mm
Speed	Relay Control Unit As Standard	
	Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s
	Optional Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking	
	Opening Speed upto Closing Speed	2.0 m/s 0.5 m/s
Security Features	EN 13241-1	Standard
Resistance to Wind Load	EN 12424	Class 2
Curtain	Fabric	0.9 - 1.5 mm
	Transparent PVC Section	2.0 mm
Guide Material / Surface	FDA Approved Polystone® M-Natural	Standard
Shaft / Operator Cover	Straight	Standard
Operator and Control	Connecting Voltage	400V – 3ph, N
	Open-Stop-Close Button	Standard
	Protection Category (Operator / Control)	IP 54 / IP 65
	Emergency-OFF Button	Optional
	Closing Zone Monitoring	Light Grille IP 67
	External Route Monitoring	Photocell
	Door area Monitoring	Radar Presence Detector Induction Loop
	Electronic Limit Switch	Standard
Emergency Opening	Crank Handle	Standard
Standard Curtain Colours	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><span style="color: blue;">■</span> Blue Similar to RAL 5010</p> <p><span style="color: yellow;">■</span> Yellow Similar to RAL 1021</p> <p><span style="color: orange;">■</span> Orange Similar to RAL 2004</p> <p><span style="color: white;">■</span> White Similar to RAL 9003</p> </div> <div style="width: 45%;"> <p><span style="color: red;">■</span> Red Similar to RAL 3002</p> <p><span style="color: grey;">■</span> Grey Similar to RAL 7035</p> <p><span style="color: green;">■</span> Green Similar to RAL 6005</p> </div> </div>	

# Prime Freezer








Deep Freezer Door



## Quick, Energy Saving and Air tight door

- Designed specifically for temperature controlled rooms with both positive and negative temperatures
- Special double curtain construction with insulation of aluminium foil sandwiched with two layers of fire retardant air bubble film
- Heating elements prevents ice formation even during intensive cooling
- Self-supporting construction with anti-crash protection system
- Operating temperature range: +5 to -35° C

## Technical Specifications

Door Type		Roll-up
Use	Internal Door	Standard
Door Sizes	Max PL upto Max PH upto	4500 mm 5000 mm
Speed	Relay Control Unit As Standard Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s
	Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking Opening Speed upto Closing Speed	2.5 m/s 0.5 m/s
Security Features	EN 13241-1	Standard
Resistance to Wind Load	EN 12424	Class 2
Transmission of heat	EN 12428	2.52 W/m <sup>2</sup> K
Curtain	Fabric	0.9 - 1.5 mm
	Insulation	8.0 mm
Side Guide	UHMWPE 1000	Standard
Guide Structure Material / Surface	Galvanised Steel	Standard
	Stainless Steel 304 / 316 matt finish, Aluminium	Optional
Shaft / Operator Cover	Straight	Standard
Operator and Control	Connecting Voltage	400V – 3ph, N
	Open-Stop-Close Button	Standard
	Protection Category (Operator / Control)	IP 54 / IP 65
	Emergency-OFF Button	Optional
	Closing Zone Monitoring	Light Grille IP 67
	External Route Monitoring	Inbuilt Photocell
	Door area Monitoring	Radar Presence Detector Induction Loop
	Electronic Limit Switch	Standard
Emergency Opening	Crank Handle	Standard
Standard Curtain Colours	 Blue Similar to RAL 5010  Red Similar to RAL 3002  Yellow Similar to RAL 1021  Grey Similar to RAL 7035  Orange Similar to RAL 2004  Green Similar to RAL 6005  White Similar to RAL 9003	

# Prime Freezer Duo

Double Curtain Door for Low Temperature



## Air tight dual curtain door with a blower / dryer

- Innovative dual curtain technology- simultaneous open and close operation with blower / dryer
- Dual curtain with a blower / dryer aids in isolating the Freezer area from other area reducing Convection
- Partial opening and full opening available to minimize convection and energy losses through operation of Freezer Door
- Suitable for both positive and negative temperature between +5°C to -35°C
- Prime Freezer Duo High Speed Doors are self-repairing, the door curtain resets in case it comes out of the guide due to accident like an impact with a forklift
- No rigid elements within curtains preventing any accidental damage during operation

## Technical Specifications

Door Type		Roll-up
Use	Internal Door	Standard
Door Sizes	Max PL upto Max PH upto	4500 mm 5000 mm
Speed	Relay Control Unit As Standard Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s
	Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking Opening Speed upto Closing Speed	2.5 m/s 0.5 m/s
Security Features	EN 13241-1	Standard
Resistance to Wind Load	EN 12424	Class 1
Transmission of heat	EN 12428	2.52 W/m <sup>2</sup> K
Curtain	Fabric	0.9 - 1.5 mm
Side Guide	UHMWPE 1000	Standard
Guide Structure Material / Surface	Galvanised Steel	Standard
	Stainless Steel 304 / 316 matt finish	Optional
Shaft / Operator Cover	Straight	Standard
Operator and Control	Connecting Voltage	400V – 3ph, N
	Open-Stop-Close Button	Standard
	Protection Category (Operator / Control)	IP 54 / IP 65
	Emergency-OFF Button	Optional
	Closing Zone Monitoring	Light Grille IP 67
	External Route Monitoring	Inbuilt Photocell
	Door area Monitoring	Radar Presence Detector Induction Loop
Emergency Opening	Crank Handle	Standard
Standard Curtain Colours	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><span style="color: blue;">■</span> Blue Similar to RAL 5010</p> <p><span style="color: yellow;">■</span> Yellow Similar to RAL 1021</p> <p><span style="color: orange;">■</span> Orange Similar to RAL 2004</p> <p><span style="color: white;">■</span> White Similar to RAL 9003</p> </div> <div style="width: 45%;"> <p><span style="color: red;">■</span> Red Similar to RAL 3002</p> <p><span style="color: grey;">■</span> Grey Similar to RAL 7035</p> <p><span style="color: green;">■</span> Green Similar to RAL 6005</p> </div> </div>	

# High Speed Doors

CE certified





# Prime

Classic Design












## Safe

- Safe and for continuous operations
- Self-supporting construction with anti-crash protection system
- Smooth and silent opening and closing
- Protects traction unit, enables rapid wiring and safety photocell
- Flexible curtain in self-extinguishing material
- Modular interchangeable panels permit to replace worn or damaged panels
- Vertical seals made of friction - resistant semi-hard PVC
- Advance and robust control device

## Technical Specifications

Door Type		Roll-up	
Use	Internal Door	Standard	
Door Sizes	Max PL upto Max PH upto	6000 mm 6000 mm	
Speed	Relay Control Unit As Standard Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s	
	Optional Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking Opening Speed upto Closing Speed	2.0 m/s 0.5 m/s	
Security Features	EN 13241-1	Standard	
Resistance to Wind Load	EN 12424	Class 2	
Curtain Stabilisation / Wind Load	Aluminium	Standard	
Curtain	Fabric	0.9 - 1.5 mm	
	Transparent PVC Section	2.0 mm	
Guide Material / Surface	Galvanised Steel	Standard	
	Aluminium / Stainless Steel 304 / 316 matt finish	Optional	
Shaft / Operator Cover	Straight	Optional	
Operator and Control	Connecting Voltage	400V – 3ph, N	
	Open-Stop-Close Button	Standard	
	Protection Category (Operator / Control)	IP 54 / IP 65	
	Emergency-OFF Button	Optional	
	Closing Zone Monitoring	Light Grille IP 67	
	External Route Monitoring	Photocell	
	Door area Monitoring	Radar Presence Detector	Optional
		Induction Loop	Optional
Electronic Limit Switch		Standard	
Emergency Opening	Crank Handle	Standard	
Standard Curtain Colours	 Blue Similar to RAL 5010  Yellow Similar to RAL 1021  Orange Similar to RAL 2004  White Similar to RAL 9003	 Red Similar to RAL 3002  Grey Similar to RAL 7035  Green Similar to RAL 6005	

# Prime Plus






















Sturdy and Safe



## Robust & Flexible

- External application and compact design
- Self-supporting construction with anti-crash protect system
- Protects traction unit, enables rapid wiring and safety photocell
- Flexible curtain in self-extinguishing material
- Vertical seals made of friction-resistant semi-hard PVC
- Spring steel wind lock in curtain pocket ensure silent door travel, higher wind loads and curtain stability

## Technical Specifications

Door Type		Roll-up								
Use	External Door	Standard								
Door Sizes	Max PL upto Max PH upto	10000 mm 7000 mm								
Speed	Relay Control Unit As Standard Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s								
	Optional Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking Opening Speed upto Closing Speed	2.0 m/s 0.5 m/s								
Security Features	EN 13241-1	Standard								
Resistance to Wind Load	EN 12424	Standard Optional Class 3 Class 4								
Curtain Stabilisation / Wind Load	Spring Steel	Standard								
Curtain	Fabric	0.9 - 1.5 mm								
	Transparent PVC Section	2.0 mm								
Guide Material / Surface	Galvanised Steel	Standard								
	Aluminium / Stainless Steel 304 / 316 matt finish	Optional								
Shaft / Operator Cover	Straight	Optional								
Operator and Control	Connecting Voltage	400V – 3ph, N								
	Open-Stop-Close Button	Standard								
	Protection Category (Operator / Control)	IP 54 / IP 65								
	Emergency-OFF Button	Optional								
	Closing Zone Monitoring	Light Grille IP 67								
	External Route Monitoring	Photocell								
	Door area Monitoring	Radar Presence Detector Induction Loop								
Electronic Limit Switch	Standard									
Emergency Opening	Crank Handle	Standard								
Standard Curtain Colours	<table border="0"> <tr> <td> Blue Similar to RAL 5010</td> <td> Red Similar to RAL 3002</td> </tr> <tr> <td> Yellow Similar to RAL 1021</td> <td> Grey Similar to RAL 7035</td> </tr> <tr> <td> Orange Similar to RAL 2004</td> <td> Green Similar to RAL 6005</td> </tr> <tr> <td> White Similar to RAL 9003</td> <td></td> </tr> </table>	 Blue Similar to RAL 5010	 Red Similar to RAL 3002	 Yellow Similar to RAL 1021	 Grey Similar to RAL 7035	 Orange Similar to RAL 2004	 Green Similar to RAL 6005	 White Similar to RAL 9003		
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 Yellow Similar to RAL 1021	 Grey Similar to RAL 7035									
 Orange Similar to RAL 2004	 Green Similar to RAL 6005									
 White Similar to RAL 9003										

# Prime King








Oversized Design For Large Openings



## Extremely Versatile

- An ideal solution for large openings
- Self-supporting construction
- Heavy duty lifting belts make the door versatile
- The counterweight balancing system ensures high operating standards in terms of performance & safety
- Curtain fitted with strong intermediate tubes
- Can be equipped with PVC sections for better visibility
- Protects traction unit, enables rapid wiring and safety photocell
- Flexible curtain in self-extinguishing material
- Vertical seals made of friction-resistant semi-hard PVC
- Advance and robust control device

## Technical Specifications

Door Type		Fold-up
Use	External Door	Standard
Door Sizes	Max PL upto Max PH upto	15000 mm 10000 mm
Speed	Relay Control Unit As Standard Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s
	Optional Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking Opening Speed upto Closing Speed	2.0 m/s 0.5 m/s
Security Features	EN 13241-1	Standard
Resistance to Wind Load	EN 12424	Class 2 / 3
Curtain Stabilisation / Wind Load	Galvanised Steel	Standard
Curtain	Fabric 0.9 - 1.5 mm	Standard
	Transparent PVC Section 2.0 mm	Standard
Guide Material / Surface	Galvanised Steel	Standard
	Stainless Steel 304 / 316 matt finish	Optional
Operator and Control	Connecting Voltage	400V – 3ph, N
	Open-Stop-Close Button	Standard
	Protection Category (Operator / Control)	IP 54 / IP 65
	Emergency-OFF Button	Optional
	Closing Zone Monitoring Light Grille IP 67	Optional
	External Route Monitoring Photocell	Standard
	Door area Monitoring Radar Presence Detector Induction Loop	Optional Optional
Electric Limit Switch	Standard	
Emergency Opening	Pull Cord	Standard
Standard Curtain Colours	 Blue Similar to RAL 5010  Yellow Similar to RAL 1021  Orange Similar to RAL 2004  White Similar to RAL 9003  Red Similar to RAL 3002  Grey Similar to RAL 7035  Green Similar to RAL 6005	

# Prime Conveyor

Special Desires



## Specific Model

- Safe and for continuous operations
- Self-supporting construction with anti-crash protection system
- Smooth and silent opening and closing
- Protects traction unit, enables rapid wiring and safety photocell
- Flexible curtain in self-extinguishing material
- Modular interchangeable panels permit to replace worn or damaged panels
- Vertical seals made of friction-resistant semi-hard PVC
- Used within conveyor system to save energy and reduce draught and noise level
- Advance control device with option of integration with PLC system
- Door (open / closed) position reported to the control by a volt-free contact

## Technical Specifications

Door Type		Roll-up
Use	Internal Door	Standard
Door Sizes	Max PL upto	4000 mm
	Max PH upto	4000 mm
Speed	Relay Control Unit As Standard Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s
	Optional Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking Opening Speed upto Closing Speed	2.0 m/s 0.5 m/s
Security Features	EN 13241-1	Standard
Resistance to Wind Load	EN 12424	Class 2
Curtain Stabilisation / Wind Load	Aluminium	Standard
Curtain	Fabric	0.9 - 1.5 mm
	Transparent PVC Section	2.0 mm
Guide Material / Surface	Galvanised Steel	Standard
	Aluminium / Stainless Steel 304 / 316 matt finish	Optional
Shaft / Operator Cover	Straight	Optional
Operator and Control	Connecting Voltage	400V – 3ph, N
	Open-Stop-Close Button	Optional
	Protection Category (Operator / Control)	IP 54 / IP 65
	Emergency-OFF Button	Optional
	Closing Zone Monitoring	Light Grille IP 67
	External Route Monitoring	Photocell
	Door area Monitoring	Radar Presence Detector Induction Loop
	Electronic Limit Switch	Standard
Emergency Opening	Crank Handle	Standard
Standard Curtain Colours	<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p><span style="color: blue;">■</span> Blue Similar to RAL 5010</p> <p><span style="color: yellow;">■</span> Yellow Similar to RAL 1021</p> <p><span style="color: orange;">■</span> Orange Similar to RAL 2004</p> <p><span style="color: white;">■</span> White Similar to RAL 9003</p> </div> <div style="width: 45%;"> <p><span style="color: red;">■</span> Red Similar to RAL 3002</p> <p><span style="color: grey;">■</span> Grey Similar to RAL 7035</p> <p><span style="color: green;">■</span> Green Similar to RAL 6005</p> </div> </div>	

# Prime Machine

Safeguarding Man and Machine



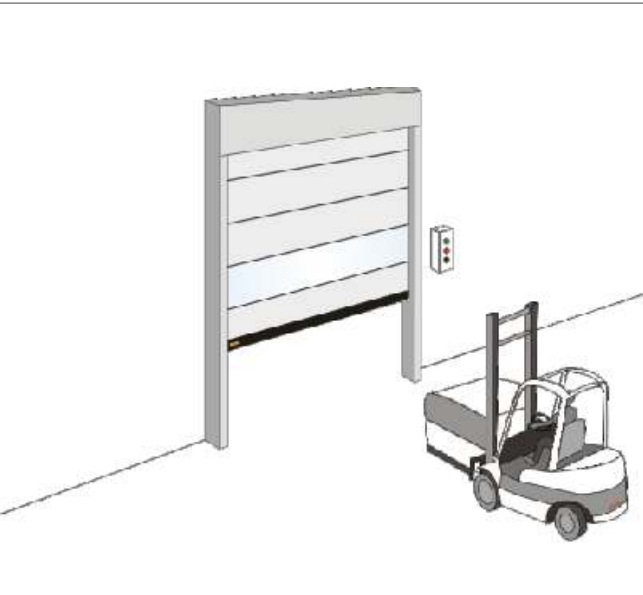


## Safe Robotic Operation

- Internal door engineered for any industrial application, safety for personnel while Robotic operation in progress
- Reduced cycle time with fast open and close operation
- Galvanised Steel structure as standard, Stainless Steel matt finish structure which integrates traction unit, rapid wirings and safety photocells
- Friction resistant semi-hard PVC door bottom laced with safety sensors
- Reliable, durable and easy to operate
- Flexible curtain in self-extinguishing material
- Spring steel wind lock in curtain pocket to ensure silent door travel and curtain stability
- IP 65 electronic panel complete with open - close - emergency stop push button unit and self-test function

## Technical Specifications

Door Type		Roll-up	
Use	Internal Door	Standard	
Door Sizes	Max PL upto Max PH upto	4000 mm 4000 mm	
Speed	Relay Control Unit As Standard Opening Speed upto Closing Speed	1.0 m/s 0.8 m/s	
	Optional Inverter Motion system to adjust different speeds, with progressive control of acceleration & deceleration during braking Opening Speed upto Closing Speed	2.0 m/s 0.5 m/s	
Security Features	EN 13241-1	Standard	
Resistance to Wind Load	EN 12424	Standard	Class 3
		Optional	Class 4
Curtain Stabilisation / Wind Load	Spring Steel	Standard	
Curtain	Fabric	0.9 - 1.5 mm	Standard
	Transparent PVC Section	2.0 mm	Standard
Guide Material / Surface	Galvanised Steel		Standard
	Aluminium / Stainless Steel 304 / 316 matt finish		Optional
Shaft / Operator Cover	Straight	Optional	
Operator and Control	Connecting Voltage		400V – 3ph, N
	Open-Stop-Close Button		Standard
	Protection Category (Operator / Control)		IP 54 / IP 65
	Emergency-OFF Button		Optional
	Closing Zone Monitoring	Light Grille IP 67	Optional
	External Route Monitoring	Photocell	Standard
	Door area Monitoring	Radar Presence Detector	Optional
		Induction Loop	Optional
Electronic Limit Switch		Standard	
Emergency Opening	Crank Handle	Standard	
Standard Curtain Colours	<span style="display: inline-block; width: 15px; height: 10px; background-color: blue; margin-right: 5px;"></span> Blue Similar to RAL 5010 <span style="display: inline-block; width: 15px; height: 10px; background-color: red; margin-left: 20px; margin-right: 5px;"></span> Red Similar to RAL 3002 <span style="display: inline-block; width: 15px; height: 10px; background-color: yellow; margin-right: 5px;"></span> Yellow Similar to RAL 1021 <span style="display: inline-block; width: 15px; height: 10px; background-color: grey; margin-left: 20px; margin-right: 5px;"></span> Grey Similar to RAL 7035 <span style="display: inline-block; width: 15px; height: 10px; background-color: orange; margin-right: 5px;"></span> Orange Similar to RAL 2004 <span style="display: inline-block; width: 15px; height: 10px; background-color: green; margin-left: 20px; margin-right: 5px;"></span> Green Similar to RAL 6005 <span style="display: inline-block; width: 15px; height: 10px; background-color: white; border: 1px solid black; margin-right: 5px;"></span> White Similar to RAL 9003		



## Manually Operated Controls

Push-buttons are used predominantly for personnel traffic. Mounted on walls or columns in the vicinity of a door. In situations where the hands are always free push-buttons are a solution



## Single Station Push Button

Plastic housing IP 65

## Three Station Push Button

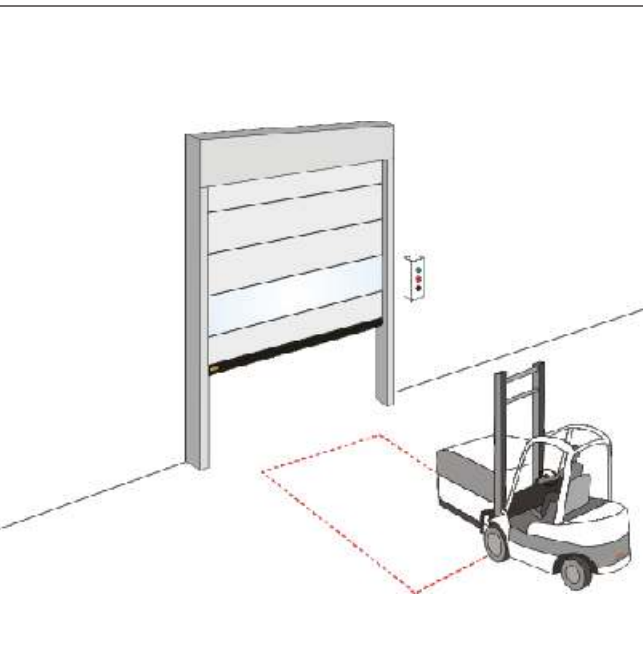
“Open/Emergency-Stop/Close”  
Plastic housing IP 65.



The hand operated Pull Cord is used mainly for forklift truck traffic so the driver can operate the switch without getting out of the vehicle.

## Pull Cord

Horizontal or vertical fitting possible, galvanised with chain control.



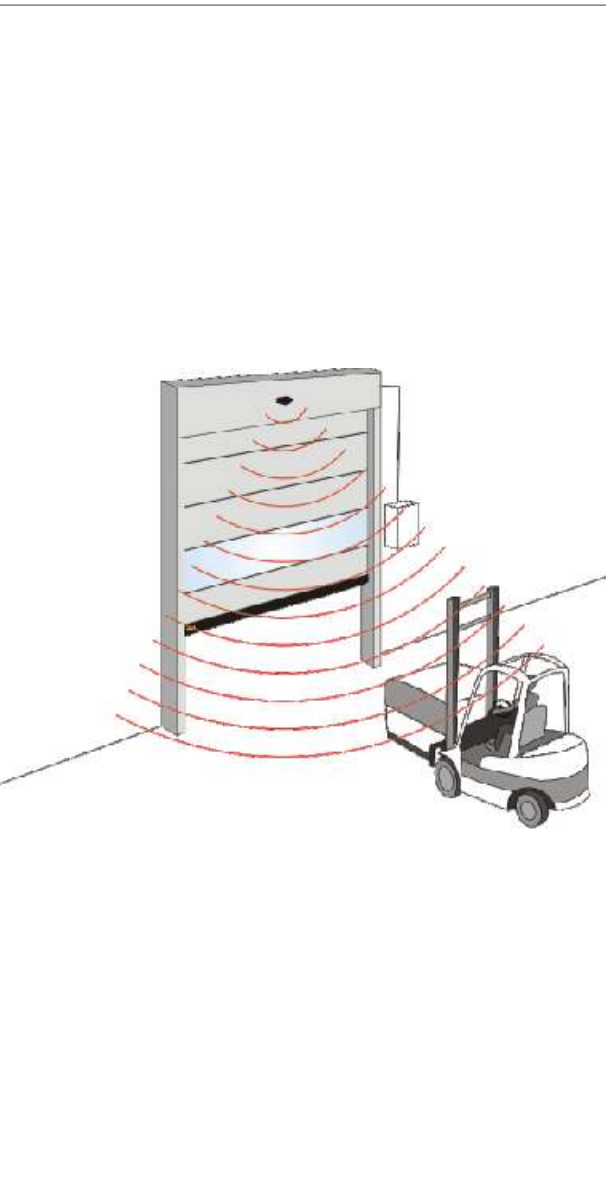
## Induction Loops

An induction loop is laid in the floor and only reacts to metal objects.

## Magnetic Loop Detector

An Induction loop causes a magnetic field. Pedestrians are not detected by the induction loop, but both moving and stationary vehicles are detected. For this reason, this can also be used as a safety device. As the loop is aligned continuously, interference through thermic influences, dampness or long term changes in component data is entirely eliminated. This guarantees maximum operational reliability and security against malfunction.





### Remote Controls

Infrared detection, fast and automatic door opening.

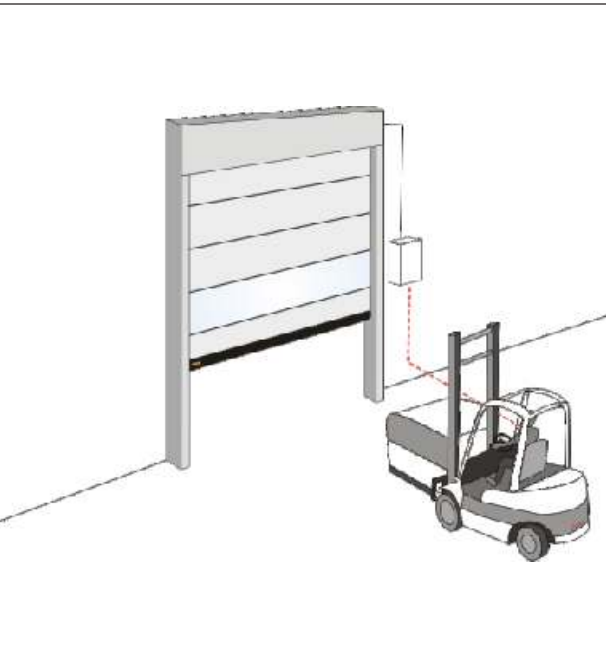
### Microwave Radar

Microwave Radar only detects moving objects. This has a conical detection area, only covers a restricted area in front of door and is direction-sensitive. The size, direction and sensitivity of the radar field are adjustable. The door is opened by people or vehicles approaching the radar beams. Normally fitted with automatic closing. Unlimited access.



### Microwave Radar with Function Discrimination

One way microwave radar with independent function selection: vehicle-pedestrian sideway transit A radar motion detector is used, when reliable coverage is required, be it in the case of people or vehicles. With the correct settings, the radar motion detector can even blank out people in the area covered. The radar system also has a direction detection feature which, when activated, recognises only those vehicles or people moving in the direction of detector. Housing protection IP 65.



### Radio Remote Control

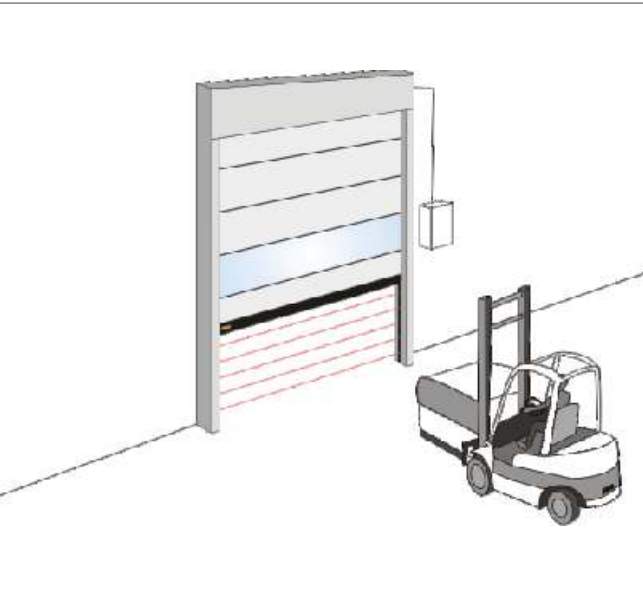
Radiographic operation (transmitter & receiver) offers the possibility of selective operation. Only vehicles or personnel with a transmitter can open or shut the door. The transmitters may have one or more channels.

### 2 / 4 Channel Hand Transmitter

The radio transmitter is available as 1,2,3 or 4-command standard design for a 433 MHZ frequency.



# Accessories

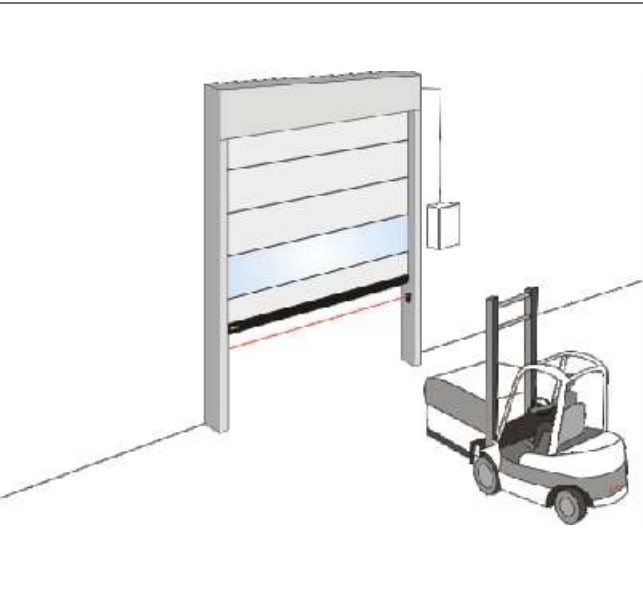


## String Safety Photosensors

The Light curtain has larger detection range and provides greater safety than photocells.

This consist of a beam transmitter and receiver. If there is an object in the area covered, i.e. if at least one of the beams is dimmed, the output of the receiver interrupts a hazardous movement of the door, and/or prevent door actuation. String Safety Photosensor monitors the closing zone of the door upto a height of 2700 mm.

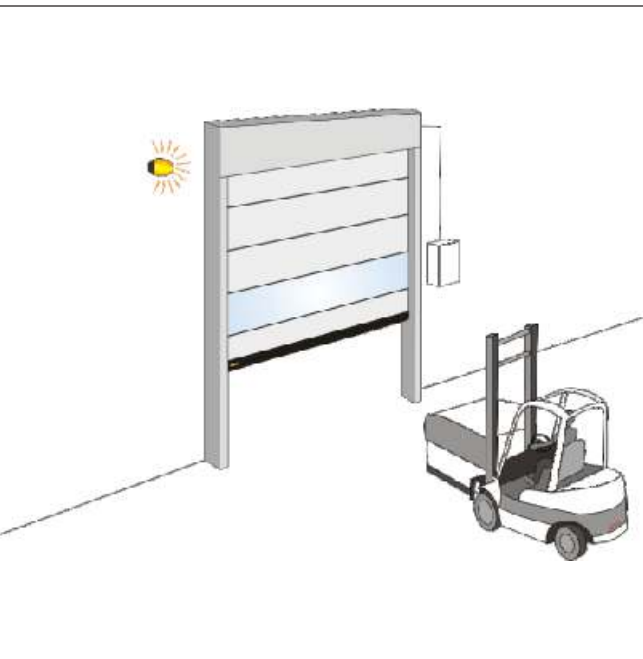
PCB two-channel receiver, 12-24 VDC to be connected to the control panel or to card-holding base.



## Photocells

The photocell is mainly used to monitor the passageway. As long as the photocell beam is broken the door will not close. Two distinguished functions of the photocells

- a) Open : The door opens when the photocell beam is interrupted.
- b) Safety : The door remains open as long as the photocell beam is interrupted.



## Safety Equipment

Visually signifies door operation.

### Traffic Light

Traffic lights for visual coverage, can be combined with each actuator and serve safety requirements.

Normal position of the door (both lights off) Opening impulse (both lights red).

Door is open (One light red, other light green)

Closing impulse (both lights red) Red / Green traffic light with mounting straps IP65.



### Flashing Light

Flashing light serves safety requirements. They give visual signals for opening and closing impulse.

Plastic housing IP 65.



# Control Units



## Technical Specifications

Model	GAPL 31X DLS	GAPL 31X IE
Use	Control Unit for Internal / External Doors with max load 2.2 kW	Control Unit for use with integrated frequency control Internal / External Doors with power ranges according to type of application: 0.75 kW, 1.5 kW and 3.0 kW
Operation	Open-Stop-Close Membrane Push Button display to provide information on door functions	Open-Stop-Close Membrane Push Button display to provide information on door functions
Function	3 Button, Open-Stop-Close automatic timer hold-open phase adjustable Safety Light Grille Close Edge Safety Device	3 Button, Open-Stop-Close automatic timer hold-open phase adjustable Safety Light Grille Close Edge Safety Device
Impulse Generator	Push Button Pull Switch Microwave Radar Mushroom Push Button Radar Detector Induction Loop Detector Remote Control	Push Button Pull Switch Microwave Radar Mushroom Push Button Radar Detector Induction Loop Detector Remote Control
Optional extras	Interlocking system of two doors Flashing Light Traffic Light (Red/Green) Door Position Detection	Interlocking system of two doors Flashing Light Traffic Light (Red/Green) Door Position Detection
Housing Dimensions	215 mm x 275 mm x 190 mm	245 mm x 455 mm x 200 mm
Protection Grade	IP 65	IP 65
Temperature Range	In operation : -10°C to +45°C In storage : -25°C to +70°C	In operation : -10°C to +55°C In storage : -25°C to +70°C
Wiring	400V, 3 ph, N, PE, Fuse 10 A	400V, 3 ph, N, PE, Fuse 10 A
Installation	Vertically on the wall, minimum height of 1100 mm	Vertically on the wall, minimum height of 1100 mm



Indian Green Building Council  
M E M B E R



ISO 9001 : 2015, ISO 14001 : 2015  
BS OHSAS 18001 : 2007

Gandhi Automations operates a policy of continuous development and reserves the right to make appropriate technical modifications / replacements without prior notice.

# GANDHI

Automations Pvt Ltd

**India's No.1 Entrance Automation & Loading Bay Equipment Company**

**CORPORATE OFFICE**

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Website: [www.geapl.co.in](http://www.geapl.co.in)



## LOADING BAY EQUIPMENT

**GANDHI**  
Automations Pvt Ltd

India's **No.1** Entrance Automation & Loading Bay Equipment Company

# EUROPEAN COLLABORATION AND TECHNOLOGY WITH INNOVATIVE AND CREATIVE ENGINEERING FOR MORE THAN 20 YEARS



## Quality & Safety - Our Priority

Dock Levelers and automation for Sectional Overhead Doors are CE certified, manufactured in accordance with

STANDARD

EN 1398

EN 13241-1 : 2003+A1:2011

DIRECTIVES : 2006/42/CE  
2004/108/CE

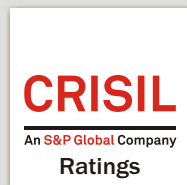
Gandhi Automations develops and manufactures its products strictly in line with these standards. You are continuously assured safe operation with regular use, assembly and maintenance.



ISO 9001 : 2015, ISO 14001 : 2015  
BS OHSAS 18001 : 2007



A PARTNER WHO STANDS BY YOUR SIDE



ORIGINAL SPARE PARTS  
Guaranteed original spare parts availability for 10 years



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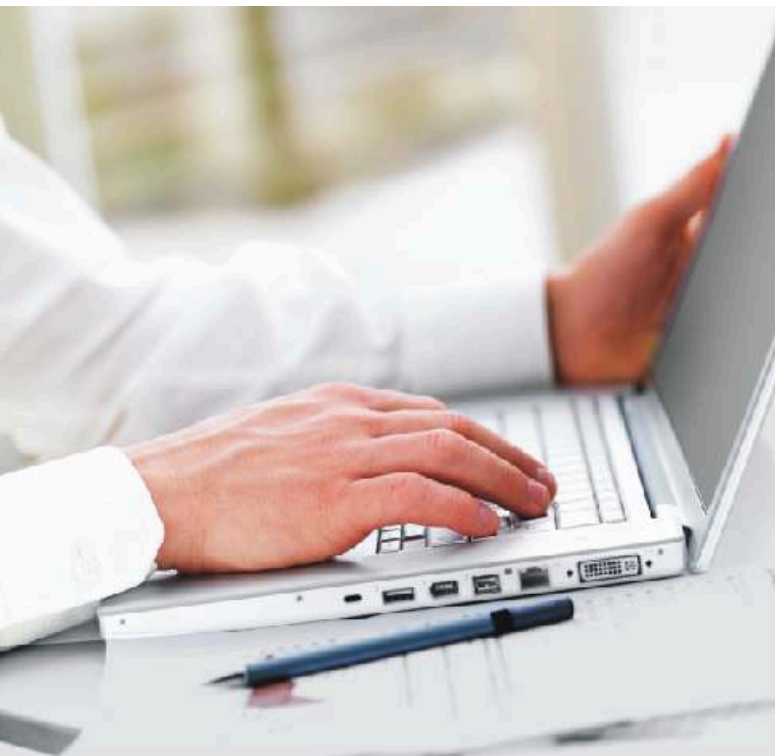
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# Our Quality For Your Safety



Gandhi Automations Pvt Ltd is India's No.1 Entrance Automation & Loading Bay Equipment Company Since 1996, over years of hard work, innovation, commitment to quality and reliable customer service. we have been designing, manufacturing, exporting and installing products that are problem free, safe and easy to operate.

Our comprehensive product portfolio consist of a range of solutions :

High Speed Industrial Doors, Dock Levelers & Dock Shelters, Rolling Shutters, Sectional Overhead Doors, Aircraft Hangar Doors & Shipyard Doors, Gates & Boom Barriers

## Head Office

Headquartered in Mumbai; the commercial capital of India, the company has expanded its manufacturing capacity, operations, geographical reach and customer base globally. Today our products are marketed by us our distributors in more than 70 countries across the globe.

## Competent Advice

Proper customer guidance and service are our top priorities. Our well trained and experienced specialists are always at your disposal from the project planning stage to final building inspection. They help you choose a perfect product solution tailored to meet your requirements.

## Quality Management

The company caters to following certifications : ISO 9001 : 2015, ISO 14001 : 2015, BS OHSAS 18001 : 2007 by TÜV Nord. This has resulted in implementing continuous improvements towards personnel training, production, equipment calibration, machinery maintenance, logistics and customer relations.



## Nationwide Network

Ahmedabad	■	Coimbatore	■	Kolkata	■	Raipur	■
Bengaluru	■	Goa	■	Lucknow	■	Ranchi	■
Bhopal	■	Hyderabad	■	Mangalore	■	Surat	■
Bhubaneswar	■	Indore	■	Nagpur	■	Vadodara	■
Chandigarh	■	Jaipur	■	New Delhi	■	Visakhapatnam	■
Chennai	■	Kochi	■	Pune	■		



## Advance Manufacturing

Our strategically located state of the art manufacturing and warehousing facility of 3,00,000 sq. ft. near Bhiwandi (40km NE of Mumbai) ensures high-quality product outputs and short delivery times.

The innovations and creative engineering applications of Gandhi Automations is a result of extensive and accurate in-house research and development

All essential product components & accessories as well as control technology units are designed in-house and produced using European collaboration and technology.

Our product engineering team uses latest software combined with advanced machinery to offer our customers an excellent engineered, efficient and finished product.



## Packaging

Special care and necessary precaution is taken while packaging our products for dispatch to the installation sites. Each consignment is supervised by a team of experts who ensure that material is dispatched efficiently and promptly.

## Install, Commissioning & Service

Our team of committed and diligent engineers and technicians are at your service continuously; many of whom are trained at advanced training centers in Europe so as to ensure perfect installation and trouble-free commissioning according to the specifications thus assuring product reliability and longevity.



## Dynamic Customer Service

Our Customer Care team offers 24x7 service. We lay great emphasis on exceptional aftersales service and provide Spares, Preventive Maintenance and Annual Maintenance Contracts for minimum downtime ensuring durability and drive maximum ROI.

Our widespread service network assures response time to a minimum.

In rare case of any product failure, all you need to do is reach for the telephone.



**TOLL FREE**

**1800 209 0200**

From Anywhere in India

One call and one of our highly trained service technicians will be on its way in a fully equipped customer service van with wide range of original spares.

# Loading Bay Equipment - Quality Engineered





Gandhi Automations offer complete logistic solutions by providing Dock Levelers, Dock Shelters, Sectional Overhead Doors and Dock Houses. As all components for your Loading Bay are available from a single source, the whole process - from product development and design to manufacture, installation and service are optimally co-ordinated, which ensures smooth loading and unloading at your Loading Bay.

The Dock Levelers from Gandhi Automations are manufactured conforming to the European Standard EN 1398 and using advanced robotic welding technology to create a precision based engineered product.

Dock Levelers allow safe and quick unloading of goods from the vehicles thus minimizing energy used, greater savings on heating & chilling costs & help maintaining the quality of transported goods.

Dock Shelters provide an optimum seal between the internal and external environments and assist in reducing the energy consumption. Dock Shelters in combination with a Dock Levelers eliminate the need for a ramp and canopies & ease of operation.

Sectional Overhead Doors are ideal for closing a loading bay; insulated Rolling Shutters can also be utilized alternately.

Gandhi Automations fabricate Dock Houses that are completely self-contained loading bays & can be installed directly on the building thus maximizing available usable space within the building.



# Dock Levelers



Built in  
conformity with  
**EN 1398**

Dock Levelers offered by Gandhi Automations are designed as per EN 1398 standard for the most demanding loading and unloading operations. Dock Levelers facilitate smooth and safe transition by compensating the difference in heights between the loading bay and the vehicle. A Dock Leveler is not simply a bridge for connecting a vehicle but a guarantee and efficient working environment to comply with the safety in work regulation.

The platform is constructed for a carrying capacity of 6t or 9t point load in almond anti-slip steel, with degreasing, phosphating, oven dried epoxy antirust + epoxy final coat finish and robotically welded supporting beams to create a precision engineered product. It has a self-supporting base construction.

The sturdy articulated steel construction is safely and reliably controlled via an electro-hydraulic system. A single push button activates the Dock Leveler into operation.

The most advanced concept of our Dock Levelers is to have the whole drive unit contained in a wall box which is installed on a wall inside the warehouse, at eye level, which allows for easy and economical maintenance, without the necessity to manoeuvre under the platform or inside the pit, where traditional powerpacks and controls are usually installed: an undoubtedly dangerous, dirty and uncomfortable operation.

All Dock Leveler controls offer the option of mutual safeguarding of the Dock Door and Dock Leveler to prevent damage.



**It goes without saying that our Dock Levelers meet all the relevant standards and directives:**

- EN 1398 Dock Levelers
- Machine Directive 2006/42/CE
- Low-Voltage Directive 2006/95/CE
- Electromagnetic Compatibility Directive 2004/108/CE

# Radius Lip Dock Levelers



Radius Lip Dock Levelers allow the dock to connect with the truck bed, thus making it possible to drive directly on and off with forklift trucks etc.

It enables a forklift or pallet truck to drive through on and off the vehicle with the material.

The self-cleaning lip hinging the self cleaning lip hinging system does not retain its position during non-use with automatic end-of-run, so as to keep the 25 mm security distance between the folded lip and structure as per EN1398 & EN 349.

CE European Certification. Robotically welded platform and lip in anti-slip steel.

\*Standard dimensions in mm of the BASE types, 6t point load (15t evenly distributed) or MAXI 9t point load (22t evenly distributed).

Model	Platform Width	Platform Length	Lip Length	Pit Width	Pit Height
RDL 2025	2000	2500	410	2040	550
RDL 2030	2000	3000	410	2040	550
RDL 2035	2000	3500	410	2040	550
RDL 2040	2000	4000	410	2040	550
RDL 2045	2000	4500	410	2140	550
RDL 2225	2200	2500	410	2240	550
RDL 2230	2200	3000	410	2240	550
RDL 2235	2200	3500	410	2240	550
RDL 2240	2200	4000	410	2240	550
RDL 2245	2200	4500	410	2240	550

\*Other dimensions available on request.



# Telescopic Lip Dock Levelers



Telescopic Lip Dock Levelers have a moveable telescopic lip, which provide a larger contact area between vehicle bed and Dock Leveler. Telescopic Lip Dock Levelers are ideal for connecting vehicles unable to drive near dock i.e. sea containers, side loading railway wagons etc.

The truck can be loaded right up to the very last centimeter as the telescopic lip can be positioned with pinpoint accuracy.

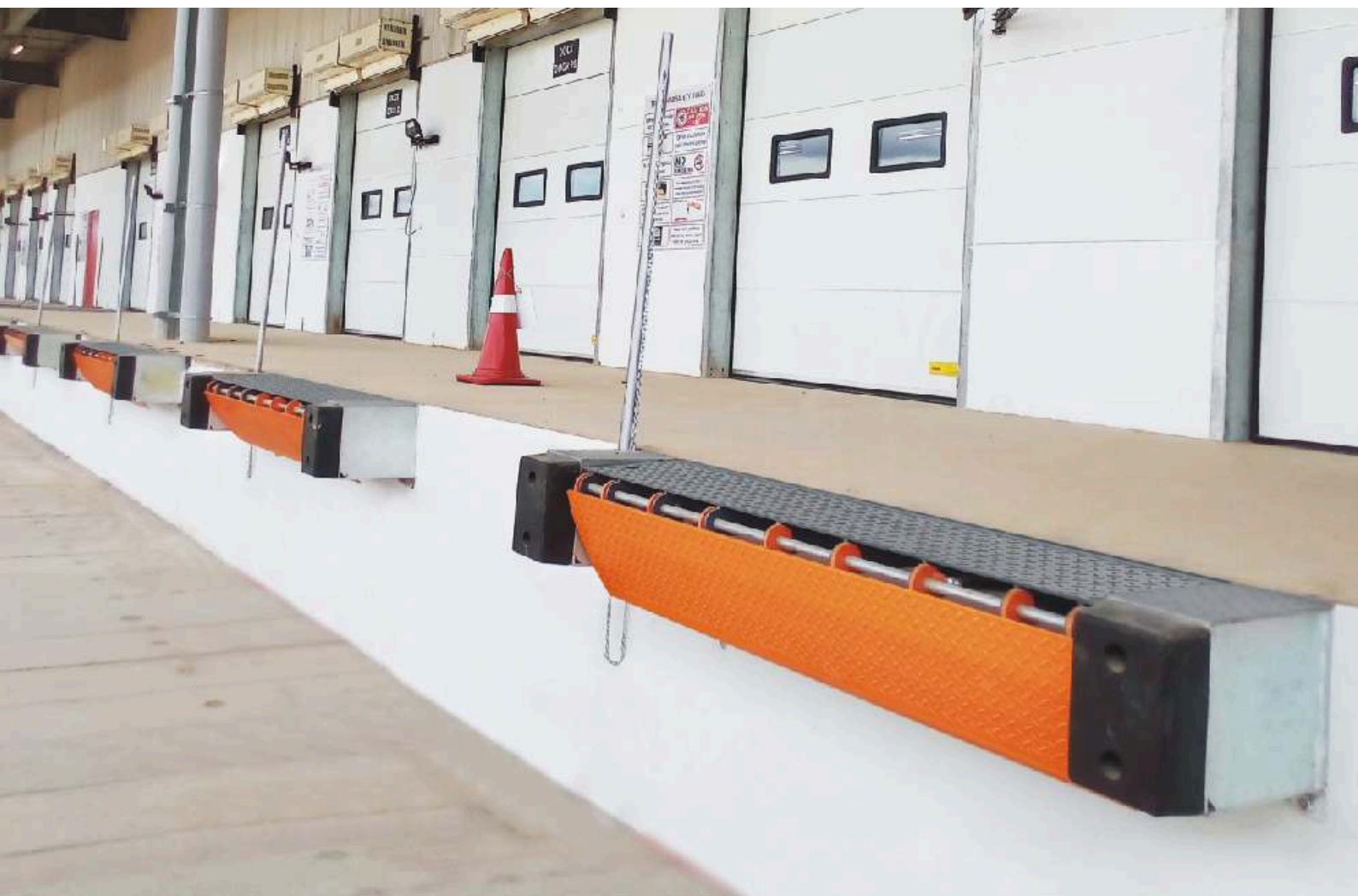
Telescopic Dock Levelers are capable to extend its lip upto 1 m. Built in conformity with EN 1398. CE European Certification. Robotically welded platform and lip in anti-slip steel.

\*Standard dimensions in mm of the BASE types, 6t point load (15t evenly distributed) or MAXI 9t point load (22t evenly distributed).

Model	Platform width	Platform length	Lip length	Pit width	Pit height
TDL 2025	2000	2500	500 - 1000	2040	550
TDL 2030	2000	3000	500 - 1000	2040	550
TDL 2035	2000	3500	500 - 1000	2040	550
TDL 2040	2000	4000	500 - 1000	2040	550
TDL 2045	2000	4500	500 - 1000	2140	550
TDL 2225	2200	2500	500 - 1000	2240	550
TDL 2230	2200	3000	500 - 1000	2240	550
TDL 2235	2200	3500	500 - 1000	2240	550
TDL 2240	2200	4000	500 - 1000	2240	550
TDL 2245	2200	4500	500 - 1000	2240	550

\*Other dimensions available on request.

## Edge-of-Dock Levelers for special requirement



Edge-of-Dock Levelers are low cost yet high performing solutions for applications that have standard or little variance in truck bed heights at loading dock. It is ideally suited where pit leveller installation is not feasible. Edge-of-Dock Leveler platform is mounted to the edge of a building wall to assist loading & unloading in a limited working range of 100mm above dock & 100mm below dock.

The open hinge lip construction, carries a lifetime guarantee and has a solid welded connection between the lip plate & the beams under the deck to ensure the lip angle of 7.5° is maintained. This is extremely important when loading / unloading vehicles with bed heights above dock leveller, to ensure that the lip always lays flat on the vehicle floor to avoid the tripping hazard.

Edge-of-Dock Leveler is developed in compliance with the latest European safety standard, EN 1398. It has a capacity of 6000kg and is suitable for use with all types of loading equipment from manual pallet trucks to fork trucks. Robotically welded platform and lip in anti-slip steel.

Although Gandhi Edge-of-Dock Leveler is operated manually by handling rod, it is supported by a gas spring which makes it easier to operate-lift and swing the platform. The design meets the demands of most simple loading operations and ensures compliance with all ergonomic requirements.

Model	Total width	Platform width	Total length	Lip range beyond bumpers	Bumper projection	Working range above dock	Working range below dock
EOD-72 HP	2255 mm	1830 mm	700 mm	245 mm	455 mm	100 mm	100 mm
EOD-2000 HP	2425 mm	2000 mm	700 mm	245 mm	455 mm	100 mm	100 mm

N.B.: The 'HP' (high profile) model is suitable for forklifts or high clearance ride-on trucks.



# All Hydraulic Dock Levelers in compliance to EN 1398



All tools pertaining to the Machine Directive 2006/42/CE are supplied with conformity certification and mark



## Compulsory Norms for the Dock Levelers

- When choosing the dimensions of the Dock Leveler, the prescriptions of the EN 1398 are to be considered. It demands a width as wide as the truckbed, and a minimum of 700 mm wider than the forklift truck. The most common choices are widths of 2200 mm side flaps reducing the width for smaller trucks.
- The length has to form a maximum slope affordable for the forklift trucks (max. 8%) or electric pallet trucks (max. 3-4%), thus a standard length of 2500, 3000 mm is usual. The maximum slope of 12.5% stated by the EN 1398 is only the "slippery" limit.
- Standard carrying capacity of the dock leveler: uniformly distributed load of 15t / 22t (or point load of 6t / 9t as defined by EN 1398 totally concentrated on one axle of forklift truck, divided on two wheel prints of 150 x 150 mm at 1m distance).
- Anti-tripping yellow-black stripes 50 mm high under the rim of the leveler and of the pit, for the whole length
- Crossing of the leveler in rest position with full capacity
- Disjointable electric feeding as per EN 60204-1

## Important Characteristics of the Dock Levelers

- CE European Certification. Built in conformity with EN 1398.
- Robotically welded platform and lip in anti-slip steel.
- Surface: Degreasing, Phosphating, oven dried epoxy anti-rust + epoxy final coat.  
Standard colour Dock Leveler : Grey RAL 7015 for RDL Series  
Grey RAL 7015 for TDL Series  
Radius Lip : Orange RAL 2000  
Telescopic Lip : Grey RAL 7015
- Hot deep galvanising and non standard colours available on request.  
Electro hydraulic Dock Leveler allows connection to both positive and negative level differences. Maximum positive excursion: 640 mm; Maximum negative excursion: 350 mm
- Safety stop valve is integrated in the lift cylinder: it blocks the Dock Leveler in case of accidental departure of the vehicle.
- Automatic side flaps for the reduction of the width of the lip, for narrow truck beds, automatically closing when the lip is extended and touches the sides of the van.
- Connection between dock and leveler without cutting points of the forklift wheels.
- Lift cylinder- Single effect; Lip cylinder-Double effect, self-venting.
- For swivelling lip levelers the self-cleaning lip that reduces the normally present dock debris, pallet pieces, nails, screws and bolts etc.
- Maximum pressure valve.
- Galvanised Steel sheet foot side protections prevent the feet from getting trapped between the loading platform and the Dock Leveler.
- Yellow / Black side strips to evidence possible steps when the Dock Leveler is in use or underneath the dock.
- Maintenance crutch with positive engagement serves to secure and support the platform during maintenance checks and repairs.
- Lip support in resting position to prevents any cutting or overwhelm.
- Various sizes of rubber bumpers available to stop the vehicle and prevent damage to the Leveler.
- Tilt allows the Dock Leveler to compensate for canted condition.
- Operator & control Unit: Electrohydraulic operator 415 V 50 Hz IP 54. Membrane Push Button with press & hold actuation and emergency stop integrated in IP 55 enclosure.



# Dock Levelers

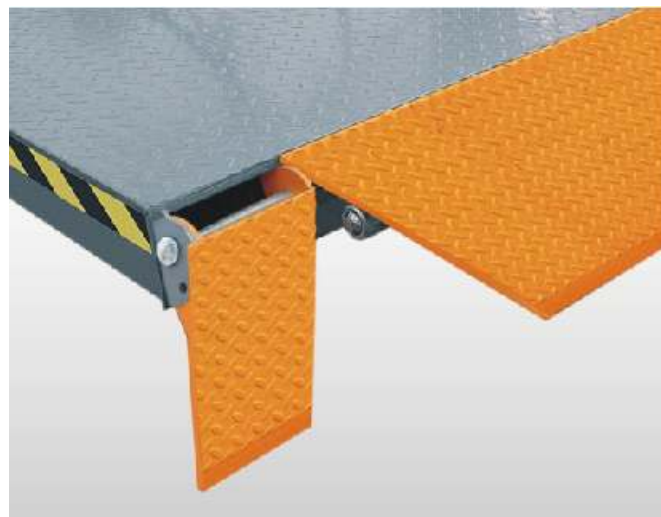




Dock Leveler is pre-mounted on a frame, to be laid on a slab built on the bottom of the traditional pit. The leveler is welded at the head and foot of the pit onto the profiles and is powered by electro hydraulic powerpack inside the pit.

### Side Flaps

Automatic side flaps allow the choice of a wider platform Dock Leveler is in conformity with the EN 1398 whilst maintaining the ability to level narrow vehicles.



Ready for pouring

### Prefabricated Pit

The prefabricated pit or dock tray allows a perfectly squared, flush with pavement pit which is aesthetically pleasing and represents the complete solution to all problems of building a pit. It is assembled in less than a quarter an hour without any possibility of mistakes. The strong steel sheets duly bracketed are structurally calculated to substitute the three side reinforced walls. The monolithic front connection with bumpers made of hanger steel supports is a guarantee of resistance against the shocks of the docking vehicles. It is not necessary to build the perimetrical reinforced walls, which reduce adherence. No reinforcement is necessary. The risk of out-of-squaring pits is eliminated, thanks to the squaring jig. A pit with clearance to receive tail-lift is also available.

# Dock Shelters & Seals



Cutting off the inside environment from the outside, it is not only useful to the human working conditions but also for avoiding useless wastes, therefore resulting into energy saving, ecological safeguard, protection of perishable goods and greater working efficiency.

Gandhi Automations offers a complete range of Dock Shelters available for every kind of use and environment; to protect the internal heated environments from the outside cold conditions or the chilled ones from outside heat and also from rain, wind, snow & dust.

Strong and of good quality, the different models are designed to resist to the docking of the vehicles, reducing their impact in different ways.

## **Better Dock Safety**

Dock Shelters seal the gap between the building and the vehicle in such a way that when the Sectional Overhead Door is opened goods and personnel are protected against the harsh weather conditions outside.

Dock Shelters provide a seal between the internal and external environments thus assisting in reduction of energy consumption. The savings in energy costs is considerable.





Dock Level



Ground Level

## Retractable Dock Shelters

With a Dock Shelter installed, the truck and dock form one closed entity, shutting out all risks from outside. Both for new and existing buildings we can always realize an optimum sealing, when necessary with a customized Dock Shelter.

The Retractable Dock Shelter is suitable for all vehicle sizes and has flexible design. Retractable steel framework is supplied with hinged arms to provide a shelter which if struck by misaligned vehicle easily retracts behind the bumperface without any damage to the shelters.

The Retractable Dock Shelter is the standard solution for energy-saving oriented operators. The vehicle reverses into the Dock Shelter which seals it off with flexible side and top curtains, giving weather protection during the loading and unloading process. The result is an improved working environment and goods protection. The curtain material has a very high wear and tear resistance.

The trailer backs into the Dock Shelter, with the driver able to centralize upon the clearly visible chevrons on the side curtains. Driving approx. 500 mm into the shelter, the curtain forms an excellent seal around the trailer body. The curtains are pressed out of the door opening creating a perfect entrance for fork lifts into the trailer. The standard width of the shelters is 3500 mm. Over the years this has proven to be the best dimension, giving the best result over a very long period.

Frame is made from articulated Galvanised Steel / Aluminium retractable structure with anti-pinch retraction arms. Specially developed corner pieces of rugged construction give an excellent rigidity to an assembled framework. The rear and front frame is connected by arms with spring integrated at both ends.

Retracting and self-returning system operating on swinging arms, connecting the front to the rear part. They allow the Dock Shelter to retract in case of wrong manoeuvre of the lorry, enabling the automatic return to position thus damage is minimized.

Side and top leaf of standard yellow PVC, bright at the inside with the day light, inset into the throats of the perimeter frame.

Top horizontal leaf 1000 mm height and side horizontal leaves 630 mm width, thickness 3 mm double waving hard armored, for the best adherence to the vehicle sides.

# Dock Shelters & Seals



## Cushion Dock Shelters

Cushion Dock Shelters are best suitable for loading dock where many vehicles of approximately the same height and width load & unload and where environmental control is important. It provides a virtually air tight seal between the vehicle and building. Even the gaps between the trailer door and bodies are sealed.

Only a cushion shelter design offers you this advantage. This innovative cushion shelter has been specially designed for warehouse with the highest demands regarding the inside temperature, like cold stores and freezer stores.

Since the foam cushion slightly reduces the width of the available door opening, non-palletised goods, are recommended to avoid side cushion damage during loading and unloading.

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## Construction

The three cushions are made of elastic polyurethane foam, covered with PVC coated polyester fabric, supporting the vehicle pressures and perfectly sealing the three sides, including the space between opened rear doors and sides of the vehicle.

The covers are made of high quality vinyl, or of extremely highly wear resistant polyurethane. The vinyl material strengthened with a fabric insertion is suitable for use in moderate climates. (Vinyl loses its flexibility at temperature below  $-10^{\circ}\text{C}$  and it can break down at temperature below  $-25^{\circ}\text{C}$ ). Polyurethane is eminently suitable for situations of extremely frequent use and /or temperatures below  $-10^{\circ}\text{C}$ .

The two vertical cushions have continuous overlapped anti-friction limpets allowing for the up and down heavy friction of the vehicle on its suspensions, during the loading.

The foam cushion of the seal has a recovery rate of 98% and remains flexible in temperatures down to  $-40^{\circ}\text{C}$ . It is resistant to most solvents, chemicals, moulds and fungi. The seal covers employ ventilation exhausts vents to ensure rapid compression and decompression without problems. Bold guidance markings at the front of the seal side cushions are useful point of orientation when reversing onto the dock seal to reinforce this correct alignment we strongly advise the use of wheel guide.



Ground Level



Dock Level

## Inflatable Dock Shelters

Inflatable Dock Shelters combines an optimum seal and a virtually airtight contact with the vehicles. Ideal for temperature controlled warehouses to seal against summer heat, winter cold, draught, dust and insects. The result is substantial savings on energy, improved working environment, production and safety. Not only do the inflatable side and top seals provide the best possible closure, they also accommodate a wider range of vehicle sizes varying up to 1200 mm in height and 700 mm in width. This feature means that trucks of varying dimensions can still be sealed effectively.

## Flexibility Combined with Optimum Closure

The Inflatable Dock Shelter is made of polyester fabric PVC covered, a material resisting to hot temperatures and bad weather conditions. The frame is exceedingly robust and consist of 40 mm insulated panels. The standard cladding color is 'white or grey'. The pneumatic Dock Shelter is to be inflated only when the vehicle is in loading position. The fan can be switched off at the end of the operation and the cushion will rapidly retract to let the vehicle go. Inflatable Dock Shelters provide the most versatile seal available to service the widest variety of truck and trailer configurations.

Contrary to other types of Dock Shelters, the vehicle does not push towards the shelter. Instead the shelter is inflated around the docked vehicle providing complete seaming.

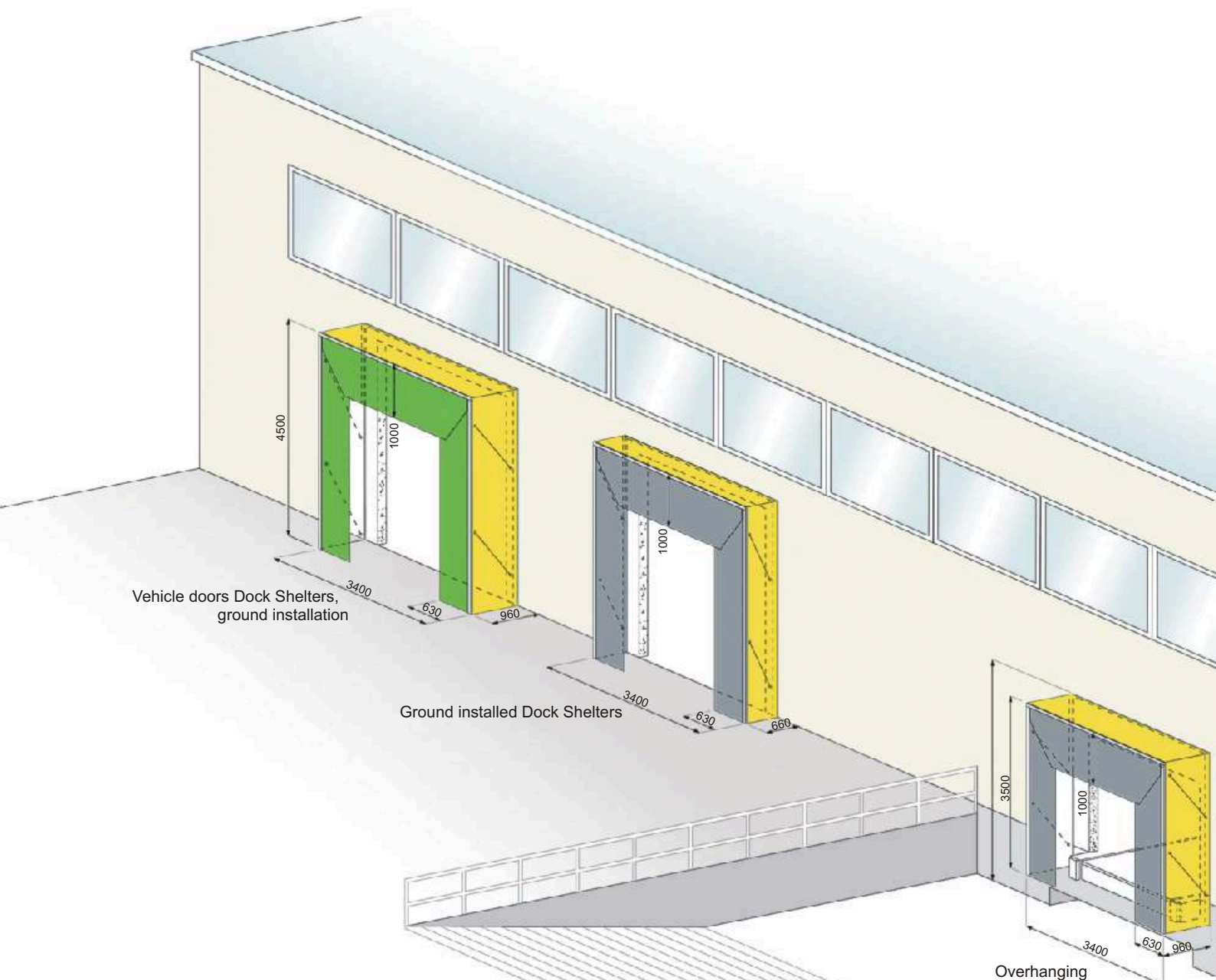
The three cushions inflate under 415 V 50 Hz three phase 0.55 kW fan air pressure until light compression against roof and sides of the lorry. The cushions retract rapidly to their rest position when the fan is switched off for allowing the

departing lorry to be immediately free from cushion pressure. The inflatable side and top seals provide a virtually airtight contact with the vehicle.



\*For Inflatable type of Dock Shelters it is strongly recommended to install / fix ground wheel-guides for perfect docking of trucks. This prevents damage to the side panels of Dock Shelters.

# Dock Shelters & Seals

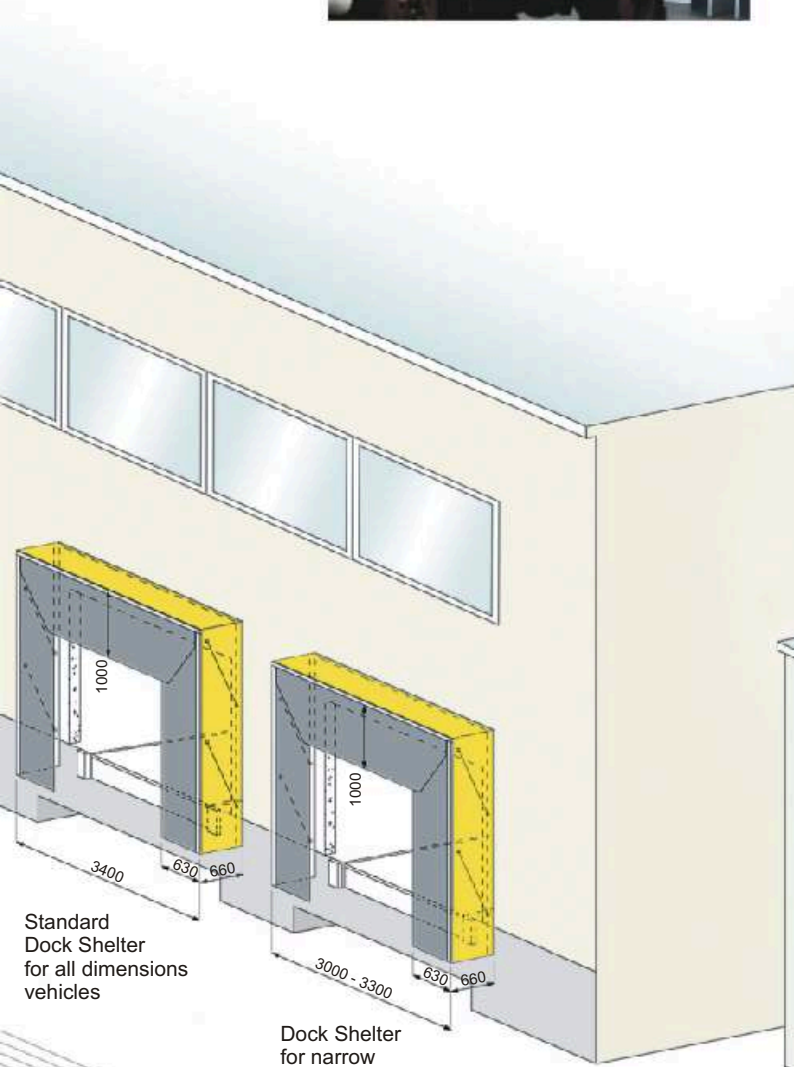
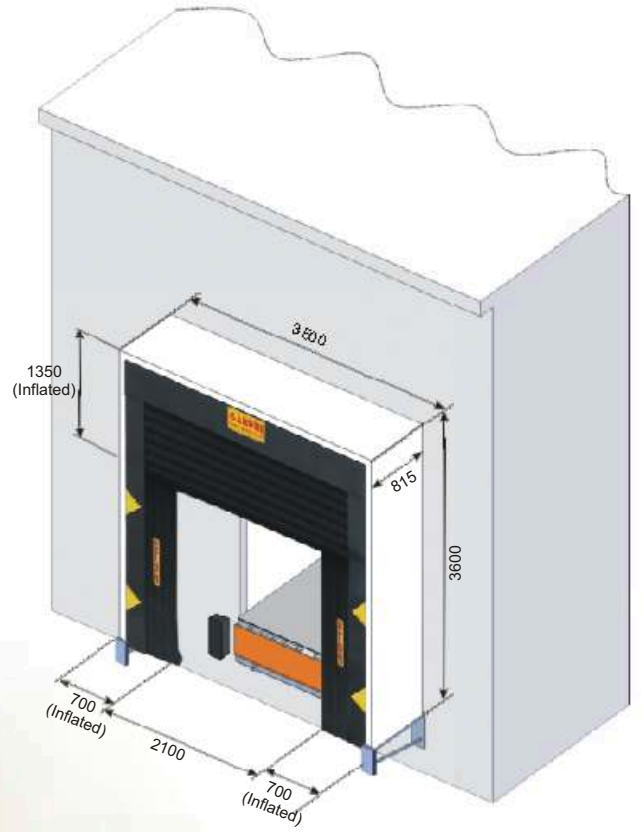


Retractable Dock Shelters



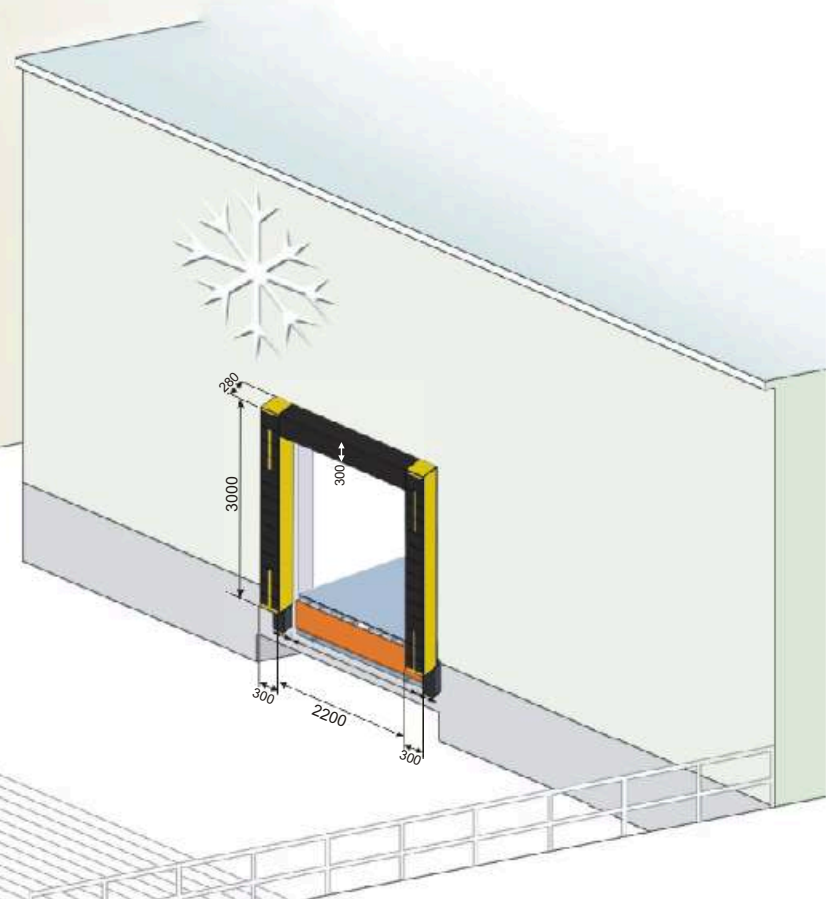
Cushion Dock Shelters





Standard  
Dock Shelter  
for all dimensions  
vehicles

Dock Shelter  
for narrow  
vehicles



# Accessories for Safe Docking



## Lorry Wheel Guides for Perfect Docking

Wheel guides are hot dip galvanised steel guides consisting of two round shaped pipes 2 metres long and appropriate diameter. Fixed on the court pavement, in front of the loading bay they grant a perfect docking of the approaching vehicles (10 cm tolerance) and preservation of the equipment. Wheel guides do not affect the wheels of the lorry and does not reach their rims.



## Vehicle Restraint Safety Wedge

The wedge is put under a vehicle wheel, as to restrain its moving, which increases the safety-on-work.

- Heavy duty type, with rudder and positioning wheels
- Construction heavy duty rigid plastic component sandwich side covered with 8 mm thick mild steel plates, blocked by passing through tyres

## Bumpers

Bumpers are used to indicate the driver that he has arrived in position. The bumpers are separately installed outside onto the side walls of the pit. No loading platform should be without them. They absorb the forces that are generated each time a vehicle docks, thereby ensuring that the Dock Shelter and platform do not get damaged in the process.

- Made of anti-friction full rubber
- Available in various sizes
- Front-top hot dip galvanized protection plate
- Spring balanced up-down Floating Bumpers move 150 mm up and 90 mm down and rest at dock rim



Super bumpers fully respond to the necessity of safeguarding the front facade of the building.

- Made of anti-friction full and hard rubber
- 150 mm width, 400 mm height, 80 mm depth with heavy steel support (total depth including steel support, 130 mm)

Mega bumpers larger in dimensions safeguards the front facade of the building.

- Made of anti-friction full and hard rubber
- 250 mm width, 450 mm height, 100 mm depth with heavy steel support (total depth including steel support, 150 mm)



## Bumpers with Steel Front Plate

Where greater wear and tear is expected, protective plates on the front of the bumpers are recommended.

- Hot deep galvanized steel plate for protection front and top loads
- 10 mm thickness for Super bumpers
- 15 mm thickness for Mega bumpers



## Dock Light

- Steel articulated arms LED Dock Light 60W in aluminium casing, IP 66.
- It is the perfect solution to bring light in the truck and docking area.
- It is easy to install inside the building next to the loading bay and will lighten every corner of the truck due to its articulated arms.

# Sectional Overhead Doors - Quality Engineered







Porto Sectional Overhead Doors are the ideal solution for all industrial and logistic needs. The design and different solutions offered ensure that the door is aesthetically pleasing and perfectly suited in any architectural environment - from modern and traditional industrial buildings to fine commercial buildings. These doors are built to ensure the highest ease and flexibility of use which, in turn, ensures a quick, hassle free and accurate replacement of old doors. Their compact size ensures more available space both inside and outside the premises. Depending on the structure of the building and the requirement a choice can be made from a standard lift, vertical lift, horizontal lift, low headroom or inclined lift.

Porto Sectional Doors come in a wide variety of designs with various features to suit your individual requirement, that guarantee

- Reliable and low-noise operation
- Extreme robustness
- Safe operation in compliance with safety requirements
- Design-oriented surfaces and optimum light solutions



## Type of Sectional Doors





### **Manual Push-Pull Sectional Doors**

This type of Sectional Doors are operated by pulling or pushing the doors manually. Counter balancing of the door weight is done using torsion springs within strong suspension shaft to reduce deflection. Due to manual exertion, these doors are ideal for very small size upto width 3000 mm x height 3000 mm.

### **Chain-Hoist Operated Sectional Doors**

This type of Sectional Doors are operated manually by pulling an endless chain. They are relatively easy to operate as compared to Push-Pull type sectional doors as they roll up and down smoothly. Counter balancing of the door weight is done using torsion springs within strong suspension shaft to reduce deflection. The hoist is installed directly in the shaft to enable the manual lifting of the door. These doors are ideal for size upto width 8000 mm x height 6000 mm.



### **Electrically Operated Sectional Doors**

This type of Sectional Doors are operated by using a range of electrical actuators made up of self-braking worm gear with hollow shaft and integrated limit switches with overload protection. During downtime, the option for manual operation is also available.

# Types of Installation



Vertical Lift ( VL Elevation)



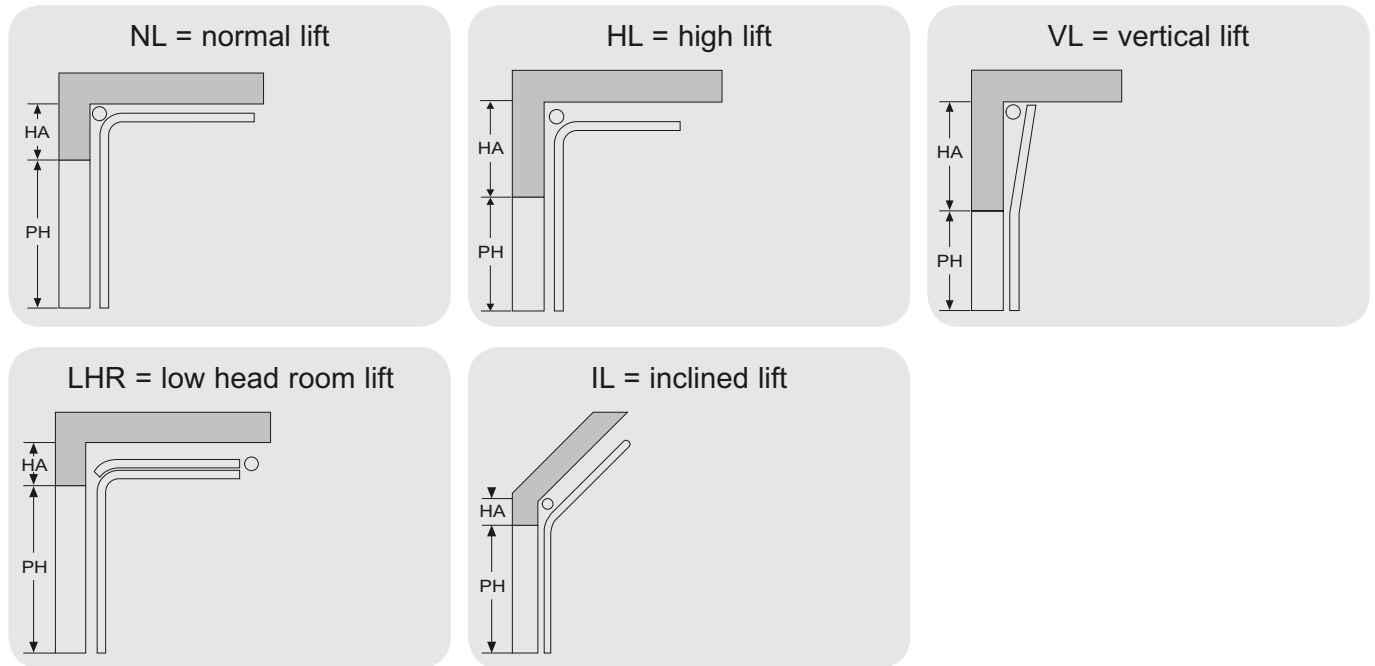
Normal Lift ( NL Elevation)



High Lift ( HL Elevation)

## Sliding System Vertical Section Drawings: Types of Installation

Minimum lintel size - 200 mm



Elevation Details	PL (mm)		PH (mm)		HA (mm)	
	Min.	Max.	Min.	Max.	Min.	Max.
Normal (NL)	1800	8000	1780	5570	420	
				6500	510	
				8000	650	
High (HL)	1800	8000	1780	5500	960	4000
				8000		
Vertical (VL)	1800	6500	1780	5000	PH+300	
		8000		8000	PH+650	
Low Head Room (LHR)	1800	5000	1780	3500	200	
Inclined Lift (IL)	1800	6000	1780	5000	510	
		8000		8000		

# Porto

## Double-skinned Steel Sectional Doors

### Panel

The Panels are sturdy and consist of double-walled steel with a polyurethane hard foam core which is foamed CFC-free. The standard thickness of the sections and therefore of the entire door leaf is 40 mm, which provides superb heat insulation and soundproofing.

The door panels are available in two heights 500 mm and 610 mm.






They are connected with each other by Galvanised Steel hinges. This guarantees safety and durability.

### Technical Characteristics

- Density :  $\pm 45 \text{ kg/m}^3$
- Adhesive strength :  $\pm 0.10 \text{ MPa}$
- Compressive strength :  $\pm 0.13 \text{ MPa}$
- Compressive Modulus of Elasticity :  $\pm 2.68 \text{ MPa}$
- Thermal conductivity :  $\pm 0.14 \text{ W/mK}$
- Heat transfer co-efficient:
  - Panel 610 mm with seal :  $U= 0.76 \text{ W/m}^2\text{K}$
  - Panel 500 mm with seal :  $U= 0.80 \text{ W/m}^2\text{K}$
  - Panel 610 / 500 mm without seal :  $U= 0.53 \text{ W/m}^2\text{K}$
- All panels are lined internally and externally with a protective PVC film



### Colours & Finishes Offered

Standard External Microrib	 WHITE similar to RAL 9010	 GREY similar to RAL 9006	 BLUE similar to RAL 5010	Standard Internal Stucco	 WHITE similar to RAL 9010
Optional External Microrib Internal Stucco	Any RAL colour on request to match the overall appearance of building				



Our Sectional Door design is optimal for customers who need robust, well-insulated and space-saving doors with safety and offer amazing advantages.

### **Compact Design**

Sectional Overhead Door side runners move vertically along the wall and parallel to the ceiling, ensuring optimal use of the available interior space.

### **Environmental Control**

Their heat insulation and soundproofing ensured by insulated panels, improves internal living conditions and energy consumption.

### **Safe and Secure**

First class materials, precise processing and continuous quality checks guarantee perfect safety, reliability and long service life. All our doors comply with safety requirement of European standards EN 13241-1.

### **Glazing for Light & Aesthetical Look**

The panels can also be designed to be combined with thermally insulated panels and aluminium panels featuring transparent acrylic, gridded or meshed windows. This design allows natural light to go through large clear area.

### **Installation Friendly**

Our door installation is fast and simple due to intelligent product optimization without having to compromise on proven quality. Numerous prefabricated parts prevent faults, and reduce the installation time thus increasing efficiency.

MaxVista







MaxVista is a Sectional Overhead Door designed to be combined with thermally insulated panels and extruded aluminium panels, shaped for inserting transparent acrylic, gridded or meshed windows. This combination gives the door a very distinctive look, which enhances the face of both commercial and industrial buildings, where MaxVista blends in perfectly as a practical and decorative feature or solution.

It makes the environment light and pleasant to work in as it allows natural light to go through the large clear area. The aluminium profiles and the glass window sections are highly resistant to the elements and ensure a longer life of the door.



# Special Requirements

Over Dimensional Sectional Door for large openings with Safety



We fabricate precisely to your application and building openings that implies to our selection of perfect design, colour, size and maximum stability. Our Sectional Doors fit openings to a maximum width of 15,000 mm and height of 10,000 mm. Future developments and continuous improvement of existing systems are our standard procedure.

# Special Requirements

## Side Door or Pedestrian Door



For additional easy access for people and small transport vehicles, a separate threshold-free side door or an integrated pedestrian door can provide access even when the Sectional Door is closed. This also saves the heat loss from the building by decreasing the number of times the door is operated making it energy efficient.

If there is enough space, a side door separate from the door installation is a good choice. We offer side doors on request in the same design as the door installation. A pedestrian door integrated in the Sectional Door is always an expedient supplement if there is no space for side door installation. All pedestrian doors open outwards for safety reasons. A special switch on electrically-driven Sectional Doors ensures that door can only be moved when the pedestrian door is closed.



# Quality that ensures Safe Door

## Silent Door Travel

Robust roller holders made of galvanised steel with adjustable nylon rollers on ball-bearings guarantee a long service life and silent door travel.

## Intermediate Hinge

The stable centre hinge is made of galvanised steel connecting the individual door panels precisely.

## Finger Trap Protection

The horizontal joints between the door panels are designed in such a way that it avoids the risk of fingers being pinched, if a hand is rested on the moving door panel, both on the inside and outside of the door leaf.

## Side Trap Guard

The side frames are completely closed from top and bottom and hence injuries are not possible due to intervention from the sides.

## Cables Guided Internally

The carrying cables are guided on the inside between the door leaf and frame. The risk of injuries are excluded as there are no protruding components.

## Seals


The seals are made of special anti-aging EPDM that are located in the following hinged points;

- Central seals between the individual panels across the entire width
- Upper doorstop finned seal fitted to seal the door near the lintel
- Vertical seals fitted to the side uprights
- Bottom Seal with rubber profile helps even to compensate for any unevenness in the floor

They ensure total insulation thus avoiding the ingress of air, dust and water.



# Safety Features

In Accordance with European Standard 13241-1 



## **Safe Door Guidance**

The rollers are guided precisely in a safety track that ensures derailment guarded operation of the door installation.

## **Torsion Springs**

The door leaf weight counterbalances on Sectional Doors in standard dimensions and is designed with torsion spring assembly. The steel torsion springs have been designed to ensure a standard life from 10,000 to 1,00,000 operation cycles.

## **Safety Device Against Spring Breakage**

This special device immediately stops the door panel from closing in the event of balancing spring breakage.

## **Safety Device Against Cable Breakage**

This special device immediately stops the door panel from moving in case of breakage of the return cables.

## **Closing Edge Safety Device**

A pair of Photocells ensures safe monitoring of the closing edge of the door, stop and reverse if any obstruction is detected before they come into contact with the door.

# Stacking Doors - Kompakt



Stacking door is an electrically operated insulated vertically stacking sectional door panels that can be installed in locations where headroom constraints or noise restrictions prevent the use of other conventional industrial doors.

The doors are manufactured as standard from 610mm deep x 40mm thick insulated galvanised panels.

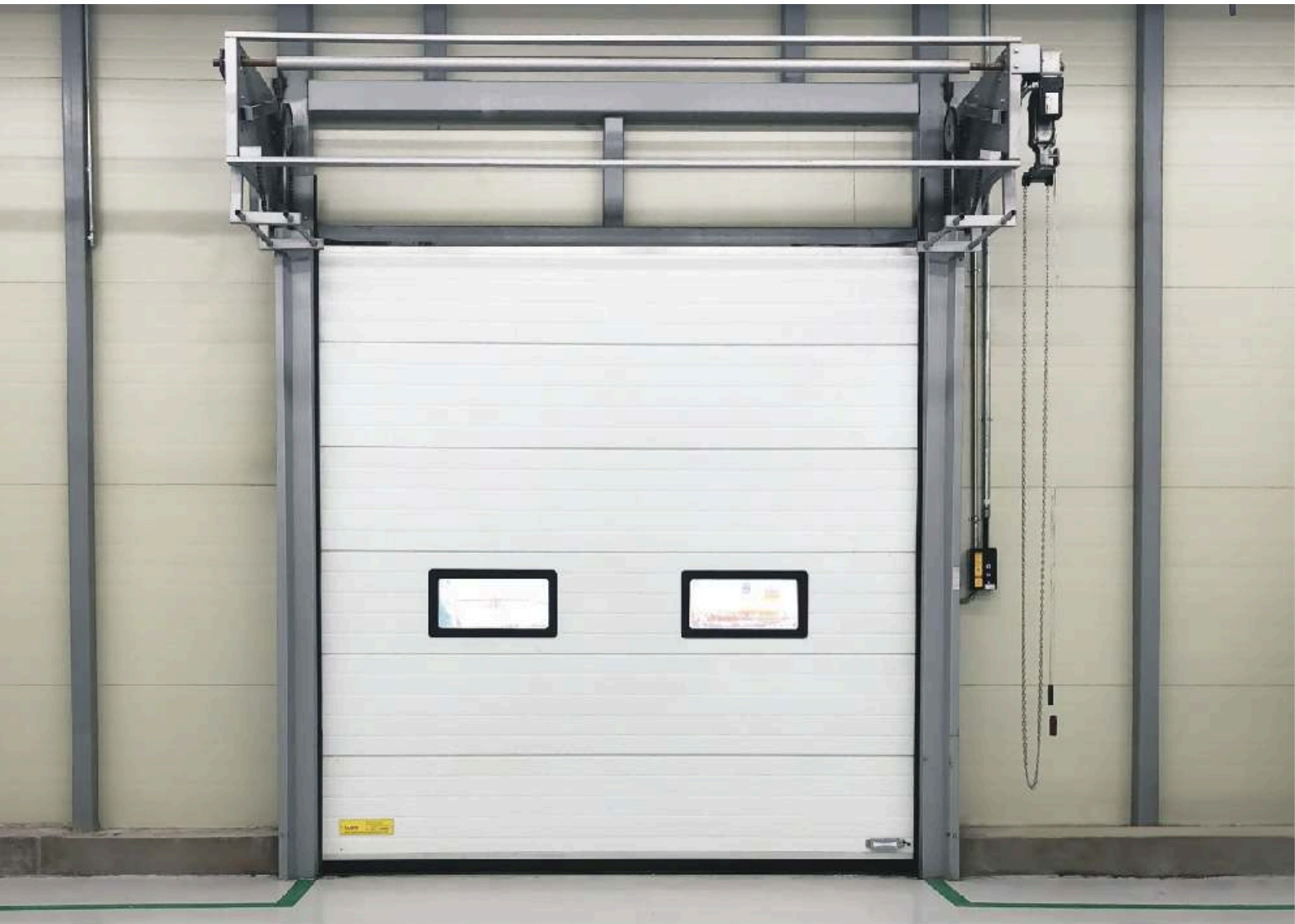
The benefits of the stacking door technology

- No fixation by the ceiling required
- Compact stacking of door panels directly above the doorway enables clear unobstructed positioning of roof lights, light fittings, syphonic piping, crane beams etc into the basic design of the building layout
- The lack of counterbalance springs reduces the need for heavy steel support work at high level thus reducing the cost of the overall door framing
- The unique track guiding system minimises the force on moving parts reducing noise emission during operation and hence reduced cost of operation and maintenance
- Combination of insulated door panels with transparent acrylic window and aluminium profiles provide sophisticated architectural solution and more natural daylight inside your workspace.



Upon opening, the door panels rise vertically and are compactly stored behind the lintel.

The door is attached to the wall without suspension from the ceiling, thus rendering it suitable for almost any installation.



## Advantages of Stacking Door

### No Overhead Steel Frame

A traditional insulated sectional overhead door requires overhead support from the roof structure unlike the stacking door which simply stacks above the door opening.

### Less installation time

The stacking door does not require overhead rails fixed to the roof structure to support the door panels or balancing springs when opened. It is therefore quicker to install and offers reduced maintenance cost.

### No Corner Installation Issue

The stacking door does not rely on the roof structure for secondary support for the door panels when opening and hence suitable for corner installations.

### More free overhead space

The stacking door stacks above the door opening and provides more free overhead space.



# Dock House



Dock House is a self-contained loading bay which is installed in front of the building providing energy efficiency, contributing to hygiene, safety and is space-saving. This means that the actual building does not have to undergo any expensive structural alterations. Dock Houses do not take up valuable internal space of the building and forms a complete loading house that is ideal for ambient and temperature controlled buildings. The design and layout can be adapted to suit the requirements of the site.

Dock Houses are used in the following situations :

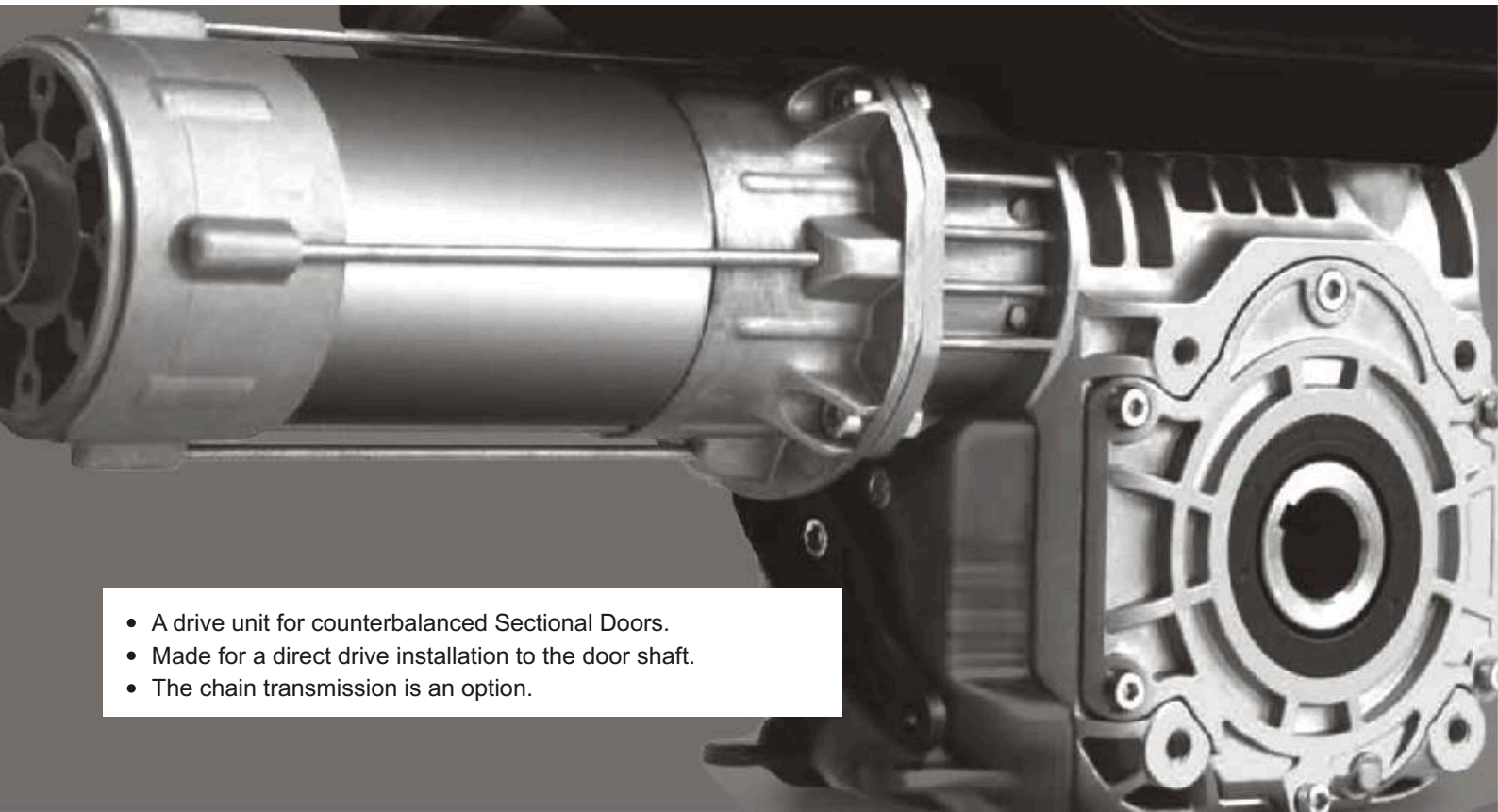
- When the manoeuvring space for trucks is insufficient to allow them to dock at a 90° angle
- When extending or converting existing buildings
- When Dock Levelers have to be positioned outside the building in order to avoid thermal bridges

Dock House is made up of following components:

- Dock Leveler
- Dock Shelter
- Sectional Overhead Door
- Roof and Side comprise a sturdy steel frame construction which is clad with double-skinned steel puf panels



# Automation Systems



- A drive unit for counterbalanced Sectional Doors.
- Made for a direct drive installation to the door shaft.
- The chain transmission is an option.

## Drive Unit is made up of

- A worm gear with hollow shaft
- An electric motor
- Integrated limit switches
- An emergency manual operation

The self-braking worm gear makes the drive irreversible. No need for an electric brake.

## Additional Details

### European Directives

Drive Unit is made in accordance with product standards EN 13241-1 Doors and EN 12453 Safety for power operated doors.

### Duty Rating

The relation between the weight of the door and the number of movements per hour allows to increase the number of movements by reducing the door's weight.

### Overload Safety Factor

Motor overload safety factor = 4 x the nominal motor amperage because the starting current of the drive can reach these levels for short periods.

### Output Speed

The maximum admissible speed depends on the construction and type of door. The admissible closing speed shall be tuned so that the operating forces must comply with EN 12453.

### Manual Operation

In installations of drive with hand crank or hand chain override, the door and self braking gear construction remain inter-connected. No danger of the door crashing down if a spring breaks.

The counter-balancing system should be inspected at least once a year.

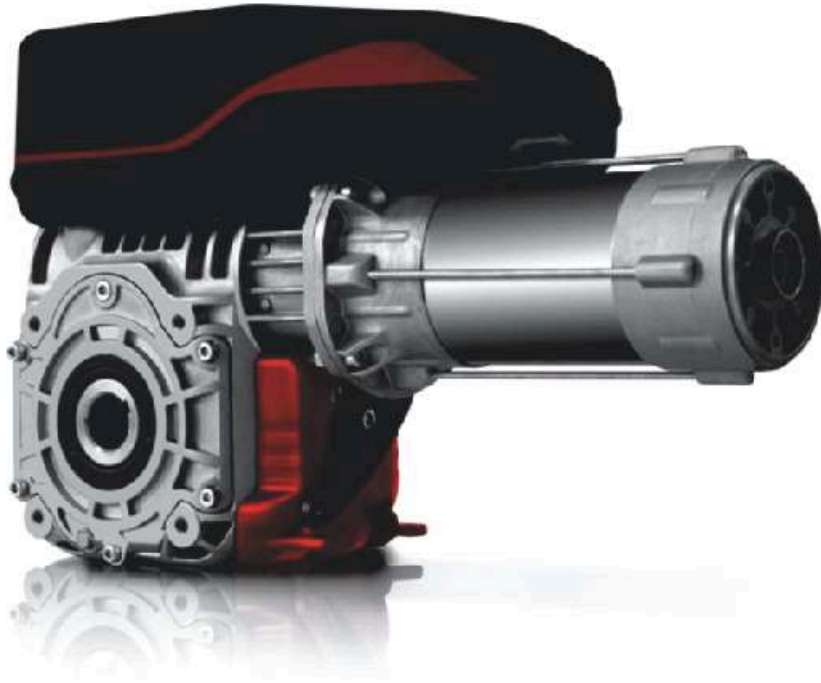
### Holding Torque

The drive unit is capable of holding the weight of the door when the spring breaks preventing the door leaves from crashing down.

The holding capability is the admissible load bearing of the worm gear construction.

# Drive Units

## Motors with integrated safety brake for industrial and commercial Sectional Overhead Doors



### Override options

Emergency manual operation types

Hand Chain Override Standard
Hand Crank Optional

### Limit switch options

Limit switch types

Mechanical Limits
Mechanical Limits (2 cams)

### Technical details

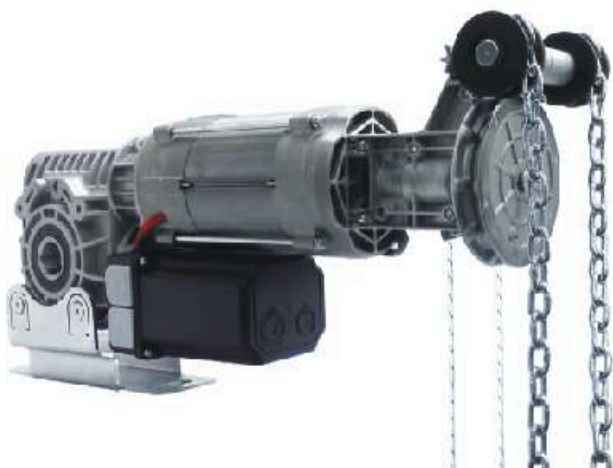
DESCRIPTION	GAPL70MCH	GAPL90TCM
Torque (Nm)	70	90
Output Speed (Min <sup>-1</sup> )	21	21
Hollow Shaft (mm)	25.4	25.4
Holding Torque (Nm)	450	450
Power (kW)	0.50	0.80
Power Supply (V~)	230	415
Frequency (Hz)	50	50
Amperage (A)	2.20	2.20
Max Cycles Per Hour	12	20
Limit Switch Range	18	18
Protection Rate (IP)	54	54

GAPL70MCH motor is the standard drive

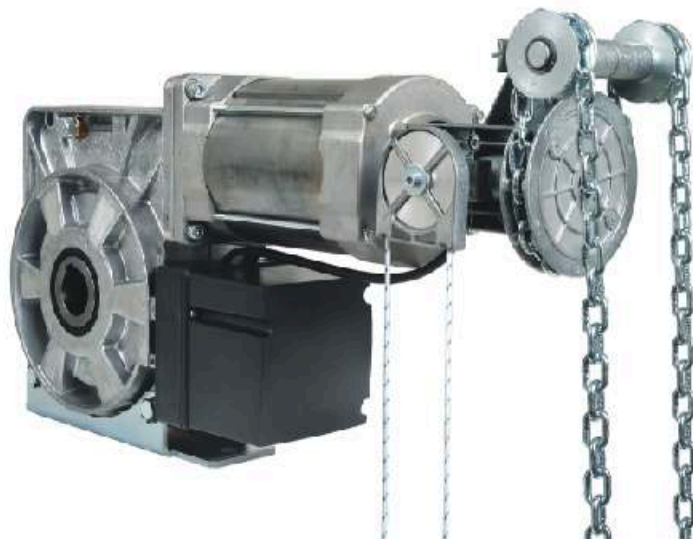
**Higher range available on request**

## Side motors with integrated safety brake for industrial and commercial Stacking Doors

Three-phase  
GAPL25TC.18



Three-phase  
GAPL65TC.48



### Override options

Emergency manual operation types

Hand Chain Override Standard
Hand Crank Optional

### Limit switch options

Limit switch types

Mechanical Limits
Mechanical Limits (2 cams)

### Technical details

DESCRIPTION	GAPL25TC.18	GAPL65TC.48
Power supply (V~)	415	415
Frequency (Hz)	50	50
Torque (Nm)	250	650
Output speed (min <sup>-1</sup> )	12	11
Power (kW)	1.1	1.5
Absorption (A)	3.0	4.5
Max cycles per hour	20	-
Duty rating (ED)	-	S3-50%
Limit switch max turns	18	10
Temperature	-5°C/40°C	-5°C/40°C
Noise (dB)	<70	<70
Protection rate (IP)	54	54
Weight (kg)	18	32

CB300 control unit as standard

# Control Units

## CB100

Multifunction control unit with radio receiver



CB100 is a multifunction control unit suitable for the manual or remote operation of single-phase motors up to 800 W.

Protected by an IP54 ABS box, it can control both safetybeams or safety edges (optoelectronic or traditional), with or without an autotest procedure through a simple initial selection.

### Features

- Operating logic :  
Semiautomatic, automatic, dead-man (only for closing)
- Manual control
  - With an additional push button to be connected with the related
  - Low-voltage plug
- Remote control
- Flashing light/courtesy light
- Safety devices :
  - Safety beams (active also for opening)
  - Safety edge
  - Optoelectronic safety edge
- Pause timer and automatic closing
- Adjustable working time, from 5 seconds to 4 minutes

### Technical Specifications

DESCRIPTION	CB100		
Power supply (V~)	230Vac $\pm$ 10% - 50Hz (singlephase) / 800 W		
Exit 24V~	terminals 11 - 12, MIN 20 Vac, MAX 26.5 V~		
Exit 12Vcc	terminals 9 (+) - 3 (GND), MIN 9.5V, MAX 12.5 V		
AUX exit	terminals 13 - 14, 250V - 2A, resistive load		
Protection fuse	4A (delayed)		
Protection rate	IP54		
Working temperature	-10°C /+60°C		
Dimensions	133 x 208 x 80 mm		
Maximum current (12V $\equiv$ / 24V~)	Loading condition	24V~	12Vcc
	Case 1	0mA	50mA
	Case 2	70mA	40mA
	Case 3	140mA	10mA

# CB300

Control unit for three-phase motors



## Features

- 3phase control unit
- More room while wiring
- Quick connections for power and limits cable
- Integrated buttons in the front cover for UP, STOP and DOWN control
- Inter-locked contactors for the best reliability
- Selectable safety input = optoelectric safety edge /nc contacts for safety beams
- Auto-check
- Selectable DOWN operating mode= dead man / momentary
- Automatic closing (selectable timing)
- Colors/sequences of led for visual display of the main functions/troubleshooting
- Parallel connection facility for grouping more CB300 in one push button
- IP rating: 54

## Technical Specifications

DESCRIPTION	CB300
Power supply (V~)	415V~ (3Ph) - 50/60 Hz
Power supply External accessories	24V~ / max 70mA
Motor power	max 2000 W
Protection rate	IP54
Working temperature	-10°C /+60°C
Dimensions (mm)	133 x 208 x 80

# Control Units

## CB500

Digital control unit for three-phase motors



### Features

- 3phase digital control unit for the control of motors with digital or mechanical limit switches
- Integrated buttons in the front cover for UP, STOP and DOWN control
- Display and keyboard for the programming of limit switches and managing of the functions
- Different operating mode
- 3 entries for anti - crushing safety devices:
  - optoelectronic safety edge
  - photocells
  - safety edge
- Prepared for the addition of a radio receiver
- Prepared for the addition of a module for the management of a traffic light / courtesy lights
- Input for an external control panel
- More room while wiring

### Technical Specifications

DESCRIPTION	CB500
Power supply (V~)	415V~ (3Ph) - 50/60 Hz
Power supply External accessories	24V~ / max 70mA
Motor power	max 4 kW
Protection rate	IP54
Working temperature	-10°C / +60°C
Dimensions (mm)	210 x 305 x 120

# Optional Accessories

All Sectional Doors are equipped with a set of accessories that provide them with all necessary safety, aesthetic elements and robustness for perfect operation. There are, however, a series of optional accessories that may be added to a final product according to the wishes of the customers. Each accessory is subjected to rigorous tests before being selected and included in the production process, to ensure the highest quality of the product that will fulfil our customer needs.



## Portholes

Rectangular window in acrylic material in black profile,  
Dimension width x height :  
636 mm x 333 mm



## Ventilation Grill

These avoid condensation and vent fumes to the outside. Available in white or black plastic, ABS material.  
Dimension width x height :  
344 mm x 138 mm



## Flashing Light

Visually signifies door operation. Flashing light serves safety requirements. They give visual signals for opening and closing impulse.  
Plastic housing IP 65

## Interlocking System - Dock Leveler & Sectional Door

This prevents operation of Dock Leveler when the Sectional Door is closed or only partially open and also prevents door from closing while the Dock Leveler is still in a working position.

## Interlocking System Between Two Doors

Developed for climate control or safety, paired doors interlock with control transfer function. If door A is open, door B cannot be opened. If door B is open, door A cannot be opened.



## Photocells

The panel down movement is automatically stopped or reversed if the infrared beam is broken. Two distinguished functions of the photocells

- a) Open : The door opens when the photocell beam is interrupted.
- b) Safety : The door remains open as long as the photocell beam is interrupted.

Mounted on wall or column in the vicinity of a door.



## Two Station Push Button

“Open/Close” Control  
Plastic housing IP 65



## Three Station Push Button

“Open/Emergency-Stop/Close” Control  
Plastic housing IP 65



Indian Green Building Council  
M E M B E R



ISO 9001 : 2015, ISO 14001 : 2015  
BS OHSAS 18001 : 2007

Gandhi Automations operates a policy of continuous development and reserves the right to make appropriate technical modifications / replacements without prior notice.

# GANDHI

Automations Pvt Ltd

**India's No.1 Entrance Automation & Loading Bay Equipment Company**

**CORPORATE OFFICE**

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## ROLLING SHUTTERS

**GANDHI**  
Automations Pvt Ltd

India's **No.1** Entrance Automation & Loading Bay Equipment Company

# EUROPEAN COLLABORATION AND TECHNOLOGY WITH INNOVATIVE AND CREATIVE ENGINEERING FOR MORE THAN 20 YEARS



## Quality & Safety - Our Priority

All automation for Rolling Shutters & Grills are CE certified, manufactured in accordance with STANDARD  
 EN 13241-1 : 2003+A1: 2011  
 DIRECTIVES : 2006/42/EC  
 2004/108/EC  
 Optional : IS 6248

Gandhi Automations develops and manufactures its products strictly in line with these standards. You are continuously assured safe operation with regular use, assembly and maintenance.

A PARTNER WHO STANDS BY YOUR SIDE

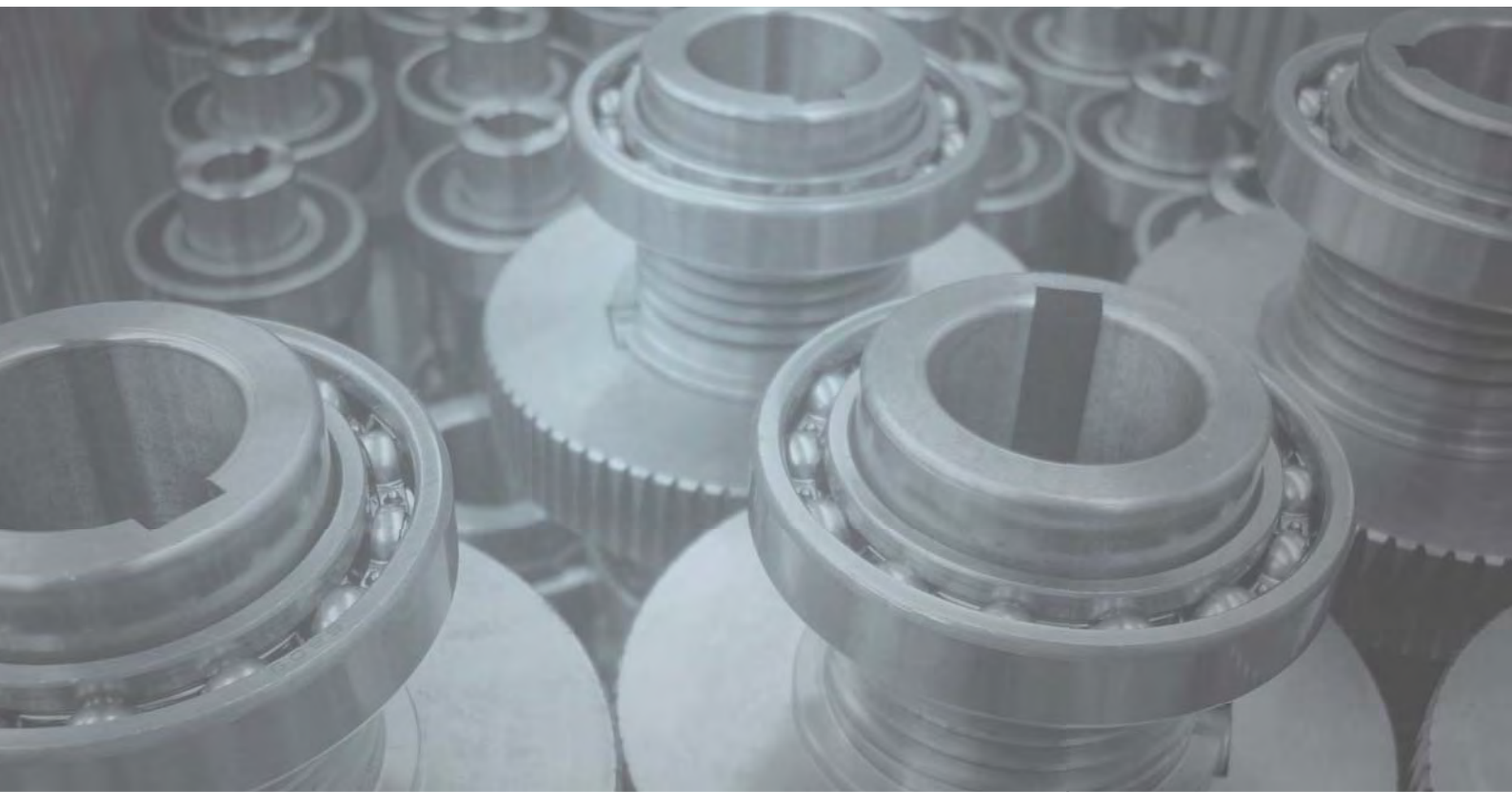


ORIGINAL SPARE PARTS  
 Guaranteed original spare parts availability for 10 years

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# Our Quality For Your Safety



Gandhi Automations Pvt Ltd is India's No.1 Entrance Automation and Loading Bay Equipment Company. This widely recognized position has been achieved over years of hard work, innovation, commitment to quality and reliable customer service. Since 1996 we have been designing, manufacturing, exporting and installing products that are problem free, safe and easy to operate.

## Head Office

Headquartered in Mumbai; the commercial capital of India, the company has expanded its manufacturing capacity, operations, geographical reach and customer base globally. Today our products are marketed by us our distributors in more than 70 countries across the globe.

## Competent Advice

Proper customer guidance and service are our top priorities. Our well trained and experienced specialists are always at your disposal from the project planning stage to final building inspection. They help you to choose a perfect product solution tailored to your requirements.

## Quality Management

The company is certified to ISO 9001 : 2015, ISO 14001 : 2015, BS OHSAS 18001 : 2007 by TÜV Nord. This has resulted in the implementation of continuous improvement in personnel training, production, equipment calibration, machinery maintenance, logistics and customer relations.



## Nationwide Network

Ahmedabad	Coimbatore	Kolkata	Raipur
Bengaluru	Goa	Lucknow	Ranchi
Bhopal	Hyderabad	Mangalore	Surat
Bhubaneswar	Indore	Nagpur	Vadodara
Chandigarh	Jaipur	New Delhi	Visakhapatnam
Chennai	Kochi	Pune	



## Advance Manufacturing

Our strategically located state of the art manufacturing and warehousing facility of 3,00,000 sq. ft. near Bhiwandi (40km NE of Mumbai) ensures high-quality products and short delivery times.

In-house research and development is the vital element within innovative & creative engineering of Gandhi Automations.

All essential product components and control technology are designed and produced by Gandhi Automations with European collaboration and technology.

Our product engineering team uses the latest software combined with technologically advanced machinery to offer our customers an excellent engineered product.



## Packaging

Special care is taken while packaging our products for dispatch to the installation sites. Each consignment is supervised by a team of experts who ensure that material is dispatched efficiently and promptly.

## Install, Commissioning & Service

Our team of committed and diligent engineers and technicians; many of whom are trained at advanced training centers in Europe to ensure perfect installation and trouble-free commissioning according to our specifications assuring product reliability and longevity.



## Dynamic Customer Service

Our Customer Care team offers 24x7 service. We lay great emphasis on exceptional aftersales service and provide Spares, Preventive Maintenance and Annual Maintenance Contracts for minimum downtime ensuring durability and drive maximum ROI.

Our widespread service network assures response time to a minimum.

In rare case of any product failure, all you need to do is reach for the telephone.



**TOLL FREE**

**1800 209 0200**

From Anywhere in India

One call and one of our highly trained service technicians will be on its way in a fully equipped customer service van with wide range of original spares.

# Gandhi Rolling Shutters - Quality Engineered





Gandhi Rolling Shutters are ideal for situations where side room is at a premium and security is required. Our Rolling Shutters require very little headroom above the structural opening. They combine strength with elegance along with durability and are designed for both external and internal applications.

Gandhi Rolling Shutters are fabricated of interlocked Galvalume, Galvanised Insulated and Non Insulated, Stainless Steel, Patented Aluminium profiles and Bright Steel Bar Rolling Grills.

Each of our Rolling Shutters is solidly constructed to promote trouble-free operation and long life. The Rolling Shutters can also be designed as per client's specifications or conforming to **IS 6248**.



# Curtain Profiles





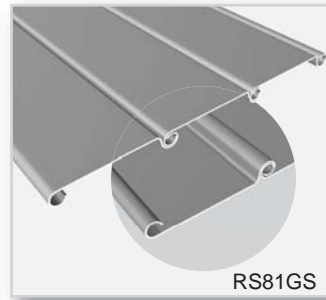
# Curtain Profiles



RS78GS



RS120GS



RS81GS



RS78SS

Curtain is fabricated of interlocking profiles of

- Single Skin Galvalume Steel / Galvanised Steel
- Single Skin Stainless Steel 304 / 316

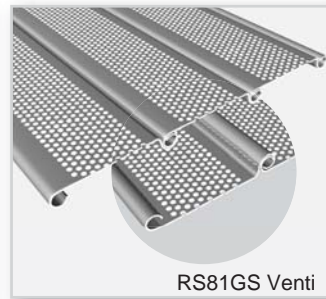
- Double Skin Extruded Aluminium alloy
- Double Skin PUF insulated Aluminium / Galvanised Steel



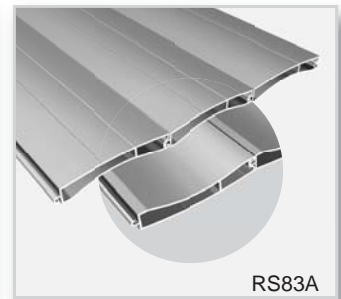
RS78GS Venti



RS120GS Venti



RS81GS Venti



RS83A

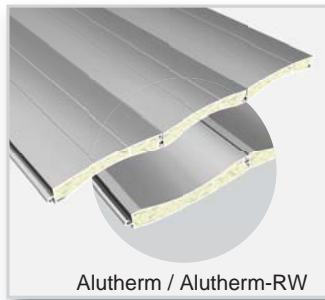
Perforated single skin profiles help in achieving visibility, light infiltration and ventilation. The perforations prevent the wind load force from acting fully on the Rolling Shutter while maintaining visibility.

Rolling Shutters can either be fabricated entirely of perforated profiles or these special profiles can be selectively used to provide partial visibility at the eye level.

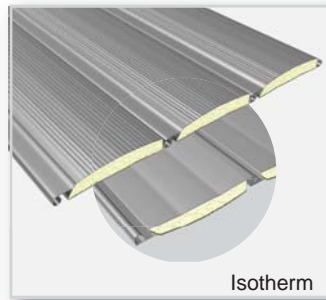
Double Skin aluminium extruded profile for heavy duty strength.



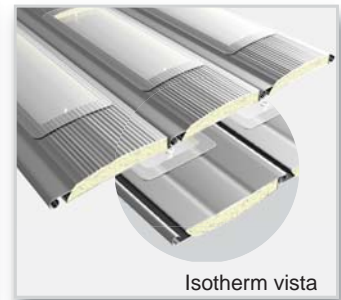
RS78GS Vista



Alutherm / Alutherm-RW



Isotherm

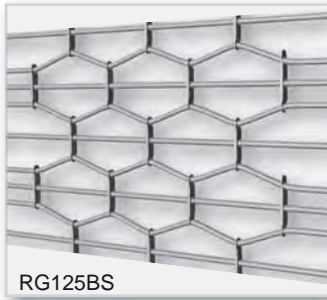


Isotherm vista

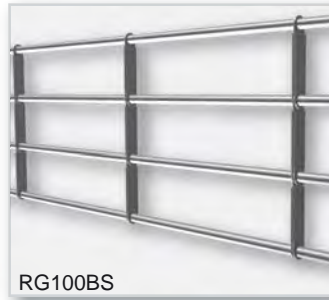
Rolling Shutters with single skin profiles are integrated with glazing windows optionally to provide visibility at eye level.

Rolling Shutters with Aluminium double skin PUF or Rockwool insulated / Galvanised double skin PUF insulated profiles combine energy efficiency with structural strength, durability, acoustic insulation, dust prevention and an overall aesthetic appeal.

The surface of these profiles is micro ribbed and profiles with Plexi Glass double glazing windows are also optionally available. The ends of alternate profiles are fitted with end locks to prevent lateral movement of profiles.



RG125BS



RG100BS

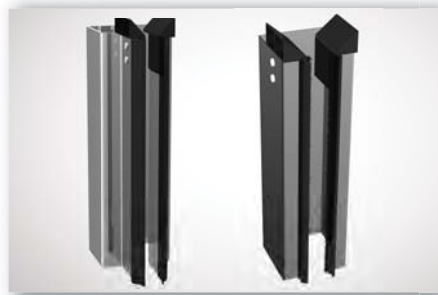
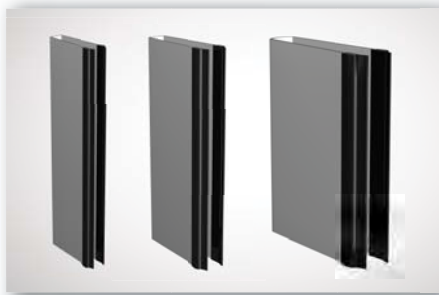


Finish

Wherever uncompromising protection and safe fresh air supply is asked for, then elegant Rolling Grill is the perfect solution. Available in Bright Steel Bar, they are the grills that will prove themselves in daily use again and again.

Our products are available in standard series with an untreated surface but on request we can provide polyurethane painted in any shade within the RAL colour range over one coat of grey epoxy primer.

Choice of two unique designs catering to all requirements.



### Guide Rails

The curtain is guided vertically by roll formed guides mounted on each side of the Rolling Shutter. The depth of guide rails depend on the width of the Rolling Shutters. Guide Rails are provided with PVC seals that ensure quiet shutter travel.

Special shaped 'Omega' guides with integrated rubber and brush seals ensure quiet shutter travel and also provide effective sealing. This is standard for Isotherm Rolling Shutter and where tight sealing is required.

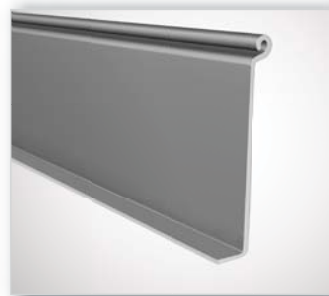
Aluminium side guide is constructed in bright - rolled aluminium with black slide profile.



### Bend-resistant Aluminum bottom

The Aluminium bottom is fitted with EPDM rubber seal (DIN 7863). The seal prevents penetration of dirt and rain, weather sealing the lower edge of the Rolling Shutter and does not produce any noise when in contact with the floor. The seals also act as deterrent against pests and rodents.

Available on request is safety edge, when in contact with obstruction the Rolling Shutter will stop and reverse to open position.



### Bend-resistant Galvanised Steel bottom

A stable Galvanised Steel / Stainless Steel profile strengthens the Rolling Shutter curtain.

# Types of Rolling Shutters



## **Gear - Operated Mechanical Rolling Shutters**

Gear Type Rolling Shutters are operated mechanically by using a hand crank / winding handle. Counter balancing of the shutter curtain weight is done by using high tension coil type springs (made from special steel spring wire) within strong suspension shaft to reduce deflection. The gear operation is through machine cut worm gear. These Rolling Shutters are ideal for small to medium size.

## **Electrically - Operated Rolling Shutters**

Electrical Type Rolling Shutters are operated by using a range of electrical actuators capable of operating shutters of all sizes. They are made up of self-braking worm gear with hollow shaft, integrated limit switches, integrated safety brakes with overload protection. Operationally, these shutters are relatively easy, hassle free and extremely safe and operate by integrating the control accessories like push-button, key selector or remote controls. During downtime, the option for manual operation is also available.



# Range of Gandhi Rolling Shutters



## Galvalume Rolling Shutters

Galvalume Rolling Shutters are ideally suited for most types of Industrial and Commercial applications. The aluminium – zinc alloy coating offers excellent corrosion resistance. It retains the sacrificial properties of zinc relative to steel while aluminium provides a tough film of aluminium oxide to increase barrier protection. Galvalume Rolling Shutters continues to gain approval by specifiers, architects, building owners and many others due to its versatility, ease of use, aesthetics and long-term performance.



## Galvalume Perforated Rolling Shutters

Galvalume Rolling Shutters with finely perforated profiles helps in achieving visibility, light infiltration and ventilation. Used extensively in shopping malls, garages and high street retail premises, perforated roller shutters present a most economical method of providing a secure closure to large or small openings. Rolling Shutters can either be fabricated entirely of perforated profiles or these special profiles can be selectively used to provide partial visibility.



## Galvanised Insulated Rolling Shutters

Galvanised Insulated Rolling Shutters are designed for a variety of industrial, warehouse, loading bays and commercial uses. The PUF insulated Rolling Shutters combine aesthetically pleasing appearance with thermal / sound insulation and dust prevention. The shutters can be custom made to fit large openings and are ideal for situations where sideroom is at a premium and security is required.



### **Aluminium Rolling Shutters**

Aluminium Rolling Shutters made of design patented extruded double wall aluminium profiles provide durability, efficiency and functionality while being light weight as well as robust. Aluminium Rolling Shutters being corrosion resistant can be installed in areas where it would be exposed daily to atmospheric conditions that cause corrosion.



### **Stainless Steel Rolling Shutters**

Stainless Steel Rolling Shutters made of SS 304 or SS 316 interlocked profiles are high grade high performance Rolling Shutters easy to operate, install and have a very good corrosion resistance while providing an appealing finish. They are capable of withstanding adverse weather conditions, thus providing 100% safety and security.



### **Bright Steel Bar Rolling Grills**

Honeycomb design of Rolling Grills provides attractive yet functional means to secure areas where public access must be restricted. Honeycomb Rolling Grills constructed of Bright Steel Bar are attractively patterned and are ideal for display windows of showrooms, shopping malls and perfectly match with any building's architecture and interior space. Rolling Grills provide optimal protection without sacrificing visual access, air circulation or light infiltration.

# Special Requirements

Over Dimensional Rolling Shutter





We fabricate our products precisely to your application and building opening. This applies to the selection of correct material profile, colour and the size. In this way you receive your perfect, completely individual solution. We are happy to advise you on specific application requirement. Our Rolling Shutters fit openings to a maximum width of 40,000 mm and height of 40,000 mm with an endless array of options to satisfy both aesthetic consideration as well as working requirement.



# Special Requirements

Vision Windows





# Special Requirements

## Wicket or Pedestrian Door



Wicket or pedestrian doors are access doors integrated within the Rolling Shutter that can provide access to pedestrians even while the Rolling Shutter is closed. With the installation of a wicket door the heat loss from the building can be reduced by the decrease in the number of times the shutter is operated making it energy efficient.

Wicket doors offer a very practical and convenient solution for pedestrians who need to use the entrance frequently.

# Drive Units

For Industrial, Commercial & Residential Rolling Shutters



- Sideone is a drive unit for Rolling Shutters
- Designed for a direct drive installation to the Shutter shaft
- The chain trasmission is an option (for heavy Rolling Shutters)

## Sideone is made up of

- A worm gear with hollow shaft
- An integrated safety brake
- Integrated limit switches
- An electric motor
- An emergency manual operation

The self-braking worm gear makes the Sideone irreversible. No need for an electric brake.

## Additional Details

### European Directives

Sideone is made in accordance with product standards EN 13241-1 Doors and EN 12453 Safety for power operated shutters.

### Duty Rating

There is a relation between the weight of the shutter and the number of movements per hour so the motor duty rating varies according to the shutter weight.

### Overload Safety Factor

Motor overload safety factor = 4 x the nominal motor amperage because the starting current of the Sideone can reach these levels for short periods.

### Output Speed

The maximum admissible speed depends on the construction and type of shutter. The admissible closing speed shall be tuned so as to allow the operating forces to comply with EN 12453.

### Manual Operation

The manual override devices (hand crank or handchain override) when power cuts-off, are based on a max strength of the end user of almost 40 kg. In big or extremely heavy shutters the manual override is only intended in down direction.

### Holding Torque

The Sideone drive unit is capable of holding the weight of the shutter without slippage.

The holding capability is the admissible load bearing of the worm gear construction.

# Sideone

Side motors with integrated safety brake for industrial and commercial shutters

Three-phase  
GAPL25TC.18

## Override options

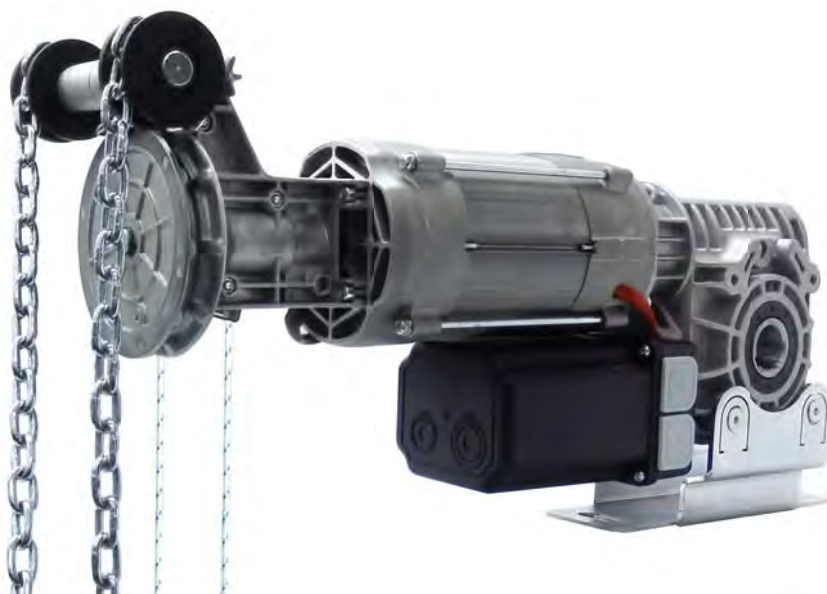
Emergency manual operation types

- Hand Crank
- Hand Chain Override

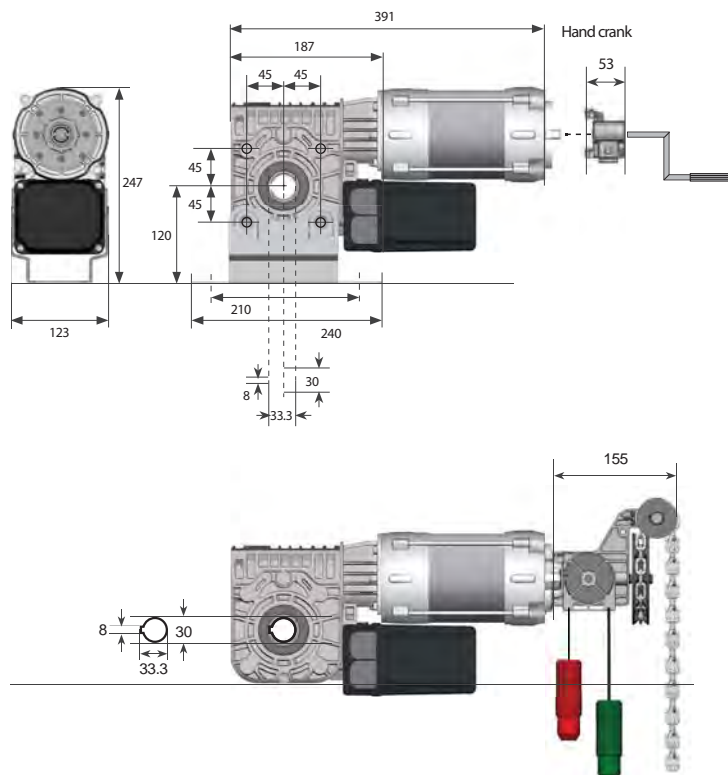
## Limit switch options

Limit switch types

- Mechanical Limits
- Digital Limits



## Dimensions (mm)



## Technical details

Power supply (V~)	400
Frequency (Hz)	50
Torque (Nm)	250
Output speed (min <sup>-1</sup> )	12
Power (kW)	1.1
Absorption (A)	3.0
Max cycles per hour	20
Limit switch max turns	18
Temperature	-5°C/40°C
Noise (dB)	<70
Protection rate (IP)	54
Weight (kg)	18

**Higher range available on request**

# Sideone

Three-phase  
GAPL65TC.48



## Override options

Emergency manual operation types

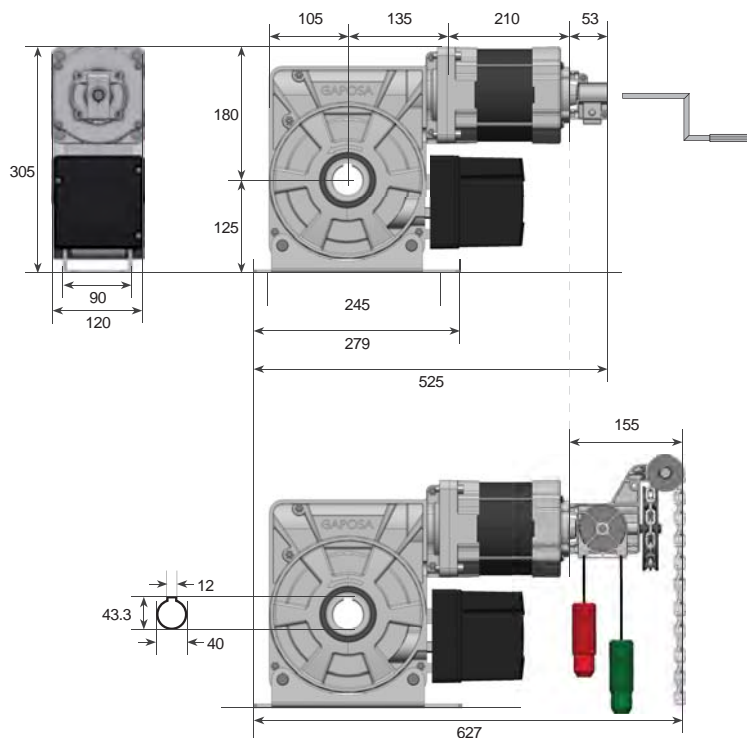
- Hand Crank
- Hand Chain Override

## Limit switch options

Limit switch types

- Mechanical Limits
- Digital Limits

## Dimensions (mm)



## Technical details

Power supply (V~)	400
Frequency (Hz)	50
Torque (Nm)	650
Output speed (min <sup>-1</sup> )	11
Power (kW)	1.5
Absorption (A)	4.5
Duty rating (ED)	S3-50%
Limit switch max turns	10
Temperature	-5°C/40°C
Noise (dB)	<70
Protection rate (IP)	54
Weight (kg)	32

**Higher range available on request**

# Torque Enhancement



Torque enhancement system is a special assembly for heavy industrial shutters. In installations with Sideone motors, the shutters shaft is driven by a chain transmission for heavy Rolling Shutters.

Due to the interchangeability of the output shaft the assembly can be installed on the left or right side of the shutter.

The set is made up of :

- The Sideone motor with mechanical limit switch
- A safety brake (RSB10A, RSB15A, RSB20A or RSB30A according to the type of assembly)
- A special bracket for the chain transmission, sprockets, chain and a set of screws

# Safety Brakes



The safety brake is a safety device for Rolling Shutters without springs performing two functions

- A bearing support for the shutter's shaft
- A mechanical brake blocking the descent of the shutter if sudden acceleration occurs

It is made up of antioxiding materials, consists of a central body with a hollow shaft and is supported by a floating metal base preventing any tube eccentricity.

Gaposa safety brakes are equipped with a patented shock-absorber system and a microswitch for disconnecting the electrical supply to the motor when the brake locks.

In order to select the most suitable model for the best application, a good understanding of the safety brake data is essential.

## Nominal torque

It is the key value to select the most appropriate safety brake according to the weight of the shutter and the diameter of the tube. Make sure that the torque of the operator is less than the nominal torque of the safety brake.

## Locking torque

It is the maximum stress which the safety brake is subjected to when it stops the rotation of the shaft.

## Working speed

It refers to the number of revolutions where the safety brake works as a simple support without functioning as a safety device. The speed of the shutter tube has to be within this value.

## Range

**RSB10A** 1000 Nm

**RSB15A** 1551 Nm

**RSB20A** 2200 Nm

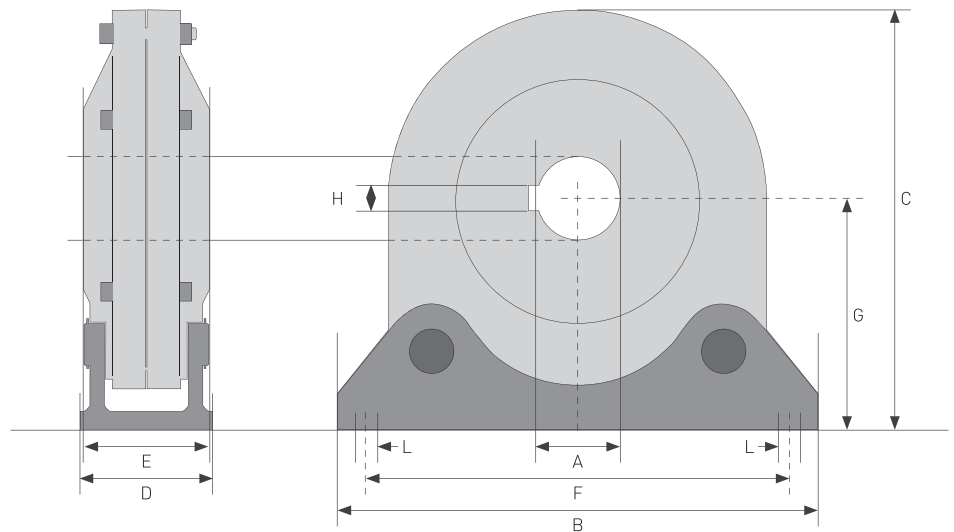
**RSB30A** 3109 Nm

RSB10A  
RSB15A  
RSB20A  
RSB30A



	RSB10A	RSB15A	RSB20A	RSB30A
Nominal torque (Nm)	1000	1551	2200	3109
Locking torque (Nm)	3560	8842	16588	-
Working speed (min <sup>-1</sup> )	12	12	12	8
Screw tightening torque (Nm)	8	12	26	30
Approval number	TorFV 5/067	TorFV 7/126	TorFV10/155	-
Weight (kg)	2.5	19.5	20	45

RSB10A  
RSB15A  
RSB20A  
RSB30A



Segment (mm)	RSB10A	RSB15A	RSB20A	RSB30A
A	40	50	65	70
B	280	320	345	415
C	260	265	290	348
D	71	71	71	104
E	57	58	63	105
F	240	290	315	365
G	156	140	153	191
H	12	14	18	20
L (Ø)	16	17	17	22
Fastening screws	2 x M14	2 x M16	2 x M16	2 x M20

# Control Units for Three Phase Motors

## CB300

Control unit for three-phase motors



### Features

- 3phase control unit
- More room while wiring
- Quick connections for power and limits cable
- Integrated buttons in the front cover for UP, STOP and DOWN control
- Inter-locked contactors for the best reliability
- Selectable safety input = optoelectric safety edge / nc contacts for safety beams
- Auto-check
- Selectable DOWN operating mode= dead man / momentary
- Automatic closing (selectable timing)
- Colors/sequences of led for visual display of the main functions/troubleshooting
- Parallel connection facility for grouping more CB300 in one push button
- IP rating: 54

### Technical Specifications

Description	CB300	CB500
Power supply (V~)	400V~ (3Ph) - 50/60 Hz	400V~ (3Ph) - 50/60 Hz
Power supply External accessories	24V~ / max 70mA	24V~ / max 70mA
Motor power	max 2000 W	max 4 kW
Protection rate	IP54	IP54
Working temperature	-10°C /+60°C	-10°C / +60°C
Dimensions (mm)	133 x 208 x 80	210 x 305 x 120

## CB500

Digital control unit for three-phase motors



### Features

- 3phase digital control unit for the control of motors with digital or mechanical limit switches
- Integrated buttons in the front cover for UP, STOP and DOWN control
- Display and keyboard for the programming of limit switches and managing of the functions
- Different operating mode
- 3 entries for anti - crushing safety devices:
  - optoelectronic safety edge
  - photocells
  - safety edge
- Prepared for the addition of a radio receiver
- Prepared for the addition of a module for the management of a traffic light / courtesy lights
- Input for an external control panel
- More room while wiring



# Compact Gear Operators

This is another operator with advance technology having patented safety mechanism in an unlikely event of chain failure. The operator with an IP 54 protection rating works on a very low vibration and decibel level. Motor has a long performance life.

## Features

- Attractive appearance, compact motor and strong lifting power
- High quality extruded aluminium alloy outer case
- Inbuilt limit switches and manual chain override in case of power failure
- Low vibration and noise
- Motor automatically protected from thermal overload by internal thermal probe
- Patented safety mechanism in case of chain failure
- Space and installation efficiency increases due to motor's compact size
- An external safety brake is a safety device available for blocking the fall of the shutter

## Safety Brake



\* Made in PRC

## Technical Specifications

Model		CRS600	CRS800	CRS1000	CRS1500	CRS2000
Rated output torque	Nm	412	647	809	1617	2450
Rated output speed	rpm	4.8	4.0	3.5	5.2	3.6
Motor power	W	370	400	400	1000	1000
Rated voltage	V/Hz	230/50	230/50	230/50	380/50	380/50
Rated current	A	3.3	4.7	4.9	3.8	4.1
Continuous working time	min	7	7	7	15	15
Max lifting	kgs	600	800	1000	1500	2000



# Accessories

# Operating & Controlling Options



## Manually Operated Controls

Push-buttons are used predominantly for personnel traffic. Mounted on walls or columns in the vicinity of a shutter.



## Radio Remote Control

Radiographic operation offers the possibility of selective operation. Only vehicles or personnel with a transmitter can open or shut the shutter.



## Safety Device & Equipment

Visually signifies door operation



### Push Button

Plastic housing IP 65



### Three Station Push Button

“Open / Emergency - Stop / Close”

Plastic housing IP 65

### 1-Channel Polyvalent Transmitter



Simple and smooth design - perfect for every location.

### Infra-Red Photocells

Functions

- Open: The shutter opens when the photocell beam is interrupted.
- Safety: The shutter remains open as long as the photocell beam is interrupted.



### Key Selector



Surface mounted key switch European cylinder (DIN 18252) Aluminium casing

### Bottom Safety Edge



Exclusive active bottom safety bar in conductive rubber to reverse motion when shutter is closing if an obstacle is hit.

### Flashing Light



Visually signifies shutter operation. Flashing light serves safety requirements. They give visual signals for opening and closing impulse.

Plastic housing IP 65

### Rotary Switch



Twisty rotary switch for surface mounted installation.

### Receiver



Operating modes:

- Hold to Close / Open
- Hold to Close / Automatic Up

# Technical Specifications

◦ = Optional    - = Not Applicable

Door Type		
Profile Type		RS78GS   RS78GS Venti
Material		Galvalume Steel (Galvanised Steel available on request)
Material Thickness (mm)		1.0 / 1.2
Surfaces Without Colour Coating		Galvalume without protective paint
Surfaces With Colour Coating		◦
Profile Height (mm)		78
Curtain Weight	kg/m <sup>2</sup> Approx.	13.0 / 15.5   12.0 / 14.5
Wind load EN 12424	Class 2 upto door width in mm Higher wind loads on request	10000 ◦
Acoustic Insulation	EN 717-1	-
Thermal Insulation	Appendix B EN 12428	-
Curtain Material	Single-skinned steel Double-skinned steel Double-skinned aluminium	Standard - -
Curtain Surface	Galvalume Steel Galvanised Steel precoated in RAL 9006 Galvanised Steel precoated in RAL 9016 Galvanised Steel precoated in RAL 5010 Stainless Steel matt finish Aluminium with one coat of grey epoxy primer by spray Bright Steel with one coat of grey epoxy primer by spray	Standard - - - - - -
Structural Shape		Curved
Standard Dimensions (mm)	(Clear Width X Clear Height)	10000 x 10000
Larger Dimensions On Request		Available
Seals	On bottom	Standard
Locking Arrangement (applicable only for GS Bottom Profiles)	Internal locking External / internal locking	◦ ◦
Side Guides		2 to 2.5mm thick Galvanised Steel, seals available on request on side guides
Finish		One coat of grey epoxy primer by spray
Wind Locks, Storm Anchors		◦   -
Shaft		Steel tube with one coat of grey epoxy primer by spray
Hood		◦
Motor Cover		◦
Bottom Profiles		<ul style="list-style-type: none"> <li>• Bend-resistant Aluminium profile for additional strength</li> <li>• Weather resistant flexible EPDM tubular seal</li> <li>• Noiseless operation</li> <li>• Galvanised Steel profile available on request</li> </ul>
Finish		One coat of grey epoxy primer by spray

## Classic Rolling Shutters

RS81GS   RS81GS Venti		RS120GS   RS120GS Venti		RS78SS
Galvalume Steel (Galvanised Steel available on request)		Galvalume Steel (Galvanised Steel available on request)		304 / 316 Stainless Steel
1.0 / 1.2		1.0		1.0
Galvalume without protective paint		Galvalume without protective paint		Stainless Steel with matt finish
°		°		-
81		119		78
12.5 / 15.0   11.5 / 14.0		15.8   13.5		13.0
10000		10000		10000
°		°		°
-		-		-
-		-		-
Standard		Standard		Standard
-		-		-
-		-		-
Standard		Standard		-
-		-		-
-		-		-
-		-		-
-		-		Standard
-		-		-
-		-		-
Flat		Curved		Curved, Flat (optional)
10000 x 10000		10000 x 10000		10000 x 10000
Available		Available		Available
Standard		Standard		Standard
°		°		°
°		°		°
2 to 2.5mm thick Galvanised Steel, seals available on request on side guides One coat of grey epoxy primer by spray		2 to 2.5mm thick Galvanised Steel with integrated seals ensure quiet shutter travel One coat of grey epoxy primer by spray		2 to 2.5mm thick SS304 / SS316 Steel, seals available on request on side guides Matt finish
°   -		°   -		-
Steel tube with one coat of grey epoxy primer by spray		Steel tube with one coat of grey epoxy primer by spray		Steel tube with one coat of grey epoxy primer by spray
°		°		°
°		°		°
<ul style="list-style-type: none"> <li>• Bend-resistant Aluminium profile for additional strength</li> <li>• Weather resistant flexible EPDM tubular seal</li> <li>• Noiseless operation</li> <li>• Galvanised Steel profile available on request</li> </ul> One coat of grey epoxy primer by spray		<ul style="list-style-type: none"> <li>• Bend-resistant Aluminium profile for additional strength</li> <li>• Weather resistant flexible EPDM tubular seal</li> <li>• Noiseless operation</li> </ul> One coat of grey epoxy primer by spray		<ul style="list-style-type: none"> <li>• Bend-resistant Steel profile SS304/SS316 for additional strength</li> <li>• Weather resistant flexible EPDM tubular seal available on request</li> <li>• Noiseless operation</li> </ul> Matt finish

# Technical Specifications

◦ = Optional    - = Not Applicable

Door Type		RS83A	Alutherm	Alutherm -RW
Profile Type		Aluminium		
Material		Aluminium		
Material Thickness (mm)		2 x 1.1		
Surfaces Without Colour Coating		Aluminium with one coat of grey epoxy primer by spray		
Surfaces With Colour Coating		◦		
Profile Height (mm)		83		
Curtain Weight	kg/m <sup>2</sup> Approx.	8	13	13
Wind load EN 12424	Class 2 upto door width in mm	8000		
	Higher wind loads on request	◦		
Acoustic Insulation	EN 717-1	-	Standard	
Thermal Insulation	Appendix B EN 12428	-	Polyurethane foam	Rockwool
Curtain Material	Single-skinned steel	-		
	Double-skinned steel	-		
	Double-skinned aluminium	Standard		
Curtain Surface	Galvalume Steel	-		
	Galvanised Steel precoated in RAL 9006	-		
	Galvanised Steel precoated in RAL 9016	-		
	Galvanised Steel precoated in RAL 5010	-		
	Stainless Steel matt finish	-		
	Aluminium with one coat of grey epoxy primer by spray	Standard		
	Bright Steel with one coat of grey epoxy primer by spray	-		
Structural Shape		Curved		
Standard Dimensions (mm)	(Clear Width X Clear Height)	8000 x 10000		
Larger Dimensions On Request		Available		
Seals	On bottom	Standard		
Locking Arrangement (applicable only for GS Bottom Profiles)	Internal locking	-		
	External / internal locking	-		
Side Guides		2 to 2.5mm thick Galvanised Steel with integrated seals ensure quiet shutter travel. (Aluminium available on request)		
Finish		One coat of grey epoxy primer by spray		
Wind Locks, Storm Anchors		-		
Shaft		Steel tube with one coat of grey epoxy primer by spray		
Hood		◦		
Motor Cover		◦		
Bottom Profiles		<ul style="list-style-type: none"> <li>• Bend-resistant Aluminium profile for additional strength</li> <li>• Weather resistant flexible EPDM tubular seal</li> <li>• Noiseless operation</li> </ul>		
Finish		One coat of grey epoxy primer by spray		

## Classic Rolling Shutters

	Isotherm Galvanised Steel	RG125BS Bright Steel	RG100BS Bright Steel
	2 x 0.5	8.0	10.0
	Precoated Galvanised in standard colours	Bright Steel with one coat of grey epoxy primer by spray	Bright Steel with one coat of grey epoxy primer by spray
	-	o	o
	104	127	100
	13	12.5	20
	9800	10000	10000
	o	o	o
	Standard	-	-
	Polyurethane foam	-	-
	-	Standard	Standard
	Standard	-	-
	-	-	-
	-	-	-
	Standard	-	-
	Standard	-	-
	Standard	-	-
	-	-	-
	-	-	-
	-	Standard	Standard
	Profile exterior & interior curved	Honeycomb	Rectangle
	9800 x 10000	10000 x 6000	10000 x 4500
	Available	Available	Available
	Standard	Standard	Standard
	-	o	o
	-	o	o
	2 to 2.5mm thick Galvanised Steel with integrated seals ensure quiet shutter travel Polyurethane spray painted similar to RAL 9006 / 9016 / 5010 over one coat of grey epoxy primer	2 to 2.5mm thick Galvanised Steel, seals available on request on side guides One coat of grey epoxy primer by spray	2 to 2.5mm thick Galvanised Steel, seals available on request on side guides One coat of grey epoxy primer by spray
	o	-	-
	Steel tube with polyurethane spray painted similar to RAL 9006/ 9016/5010 over one coat of grey epoxy primer	Steel tube with one coat of grey epoxy primer by spray	Steel tube with one coat of grey epoxy primer by spray
	o	o	o
	o	o	o
	<ul style="list-style-type: none"> <li>• Bend-resistant Aluminium profile for additional strength</li> <li>• Weather resistant flexible EPDM tubular seal</li> <li>• Noiseless operation</li> </ul>	<ul style="list-style-type: none"> <li>• Bend-resistant Aluminium profile for additional strength</li> <li>• Weather resistant flexible EPDM tubular seal</li> <li>• Noiseless operation</li> <li>• Galvanised Steel profile available on request</li> </ul>	<ul style="list-style-type: none"> <li>• Bend-resistant Aluminium profile for additional strength</li> <li>• Weather resistant flexible EPDM tubular seal</li> <li>• Noiseless operation</li> <li>• Galvanised Steel profile available on request</li> </ul>
	Polyurethane spray painted similar to RAL 9006 / 9016 / 5010 over one coat of grey epoxy primer	One coat of grey epoxy primer by spray	One coat of grey epoxy primer by spray

# Fire Rated Rolling Shutters

British Standards





# Fire Warrior



Fire Rated Rolling Shutters are rated physical fire barriers that protect wall openings from the spread of fire and are designed to close automatically in the event of fire or an alarmed event. Automatic closure will be thermally controlled by means of fusible link.

Motorised Fire Rated Rolling Shutter is tested & approved by Exova Warrington UK which comply with BS 476: Part 22: 1987 standards for stability and integrity for upto 4 hours.

Application includes industrial, commercial, institutional and retail projects where fire protection is required.

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## Curtain

Fire Warrior curtain is constructed from 79 mm cold rolled Galvalume / Galvanised Steel / Stainless Steel laths with a minimum thickness of 0.9 mm. The interlocked profiles are securely held using specially designed profile ends which act as a curtain alignment system thus eliminating lateral movement of the profiles.

## Bottom Rail

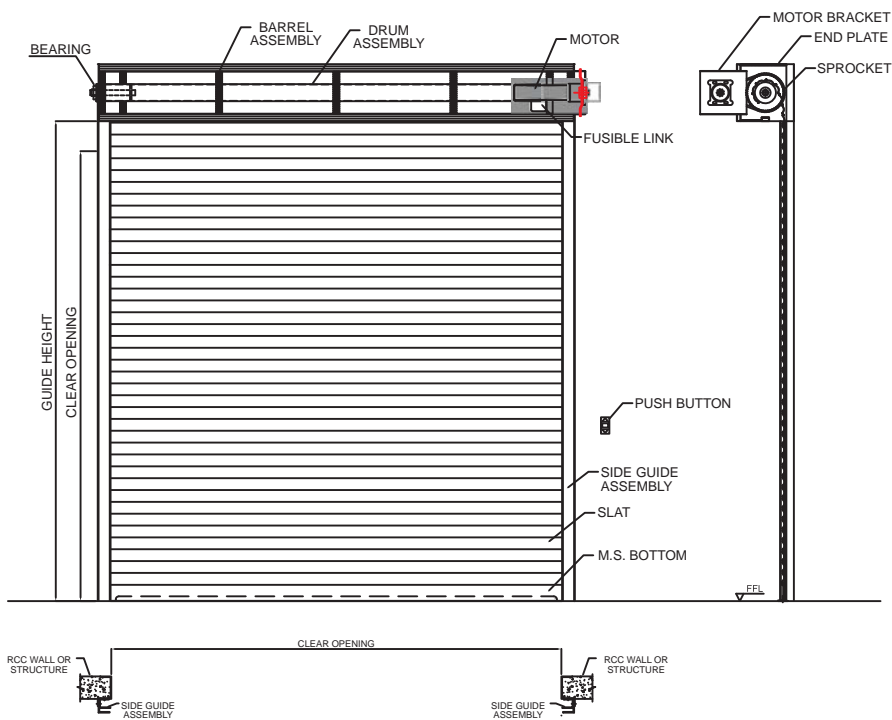
Formed from Mild Steel flat bar and angle depending on door width, welded back through a centrally located galvanised steel flat plate.

## Side Guides

Mild Steel angles of suitable size and thickness are bolted with support angles to support the guides to form a secure fix in the RCC / Steel structure.

## Barrel Assembly

The roller barrel is manufactured from Mild Steel tube of suitable outside diameter and wall thickness to suit the shutter application and is un-sprung.



## Hood

0.9mm thick pressed Galvalume / Galvanised Steel hood box complete with reinforced bracket as required to suit the shutter width.

## Shutter Operation

Electrically operated: Shutters are fitted with a geared motor complete with a push button station with "UP", "DOWN" and "STOP" buttons.

## Auto - Closing Mechanism

All Fire Shutters are equipped with fusible link mechanism. Upon sensing a temperature of 74°C, the fusible link mechanism releases the brake of the motor and allows it to descend by gravity. Where Fire Shutters are needed to be activated by fire alarm signal, a dual fusible link (electric solenoid releaser) is used which releases the brake of the motor, upon receipt of a 24VDC, 400mA fire alarm signal. A reset pull is provided to reapply the brake on the motor.

## Barrel Bracket Plate

Suitable design of thickness 4mm. Fitted with suitable anchor fasteners for fixing to the RCC / steel structure.

## Technical Details of Operator

Description		GAPL-FRS1P-600	GAPL-FRS1P-1000	GAPL-FRS3P-1500	GAPL-FRS3P-2000
Rated output torque	Nm	412	809	1617	2450
Rated output speed	r/min	4.8	3.5	5.2	3.6
Motor power	W	370	400	1000	1000
Rated voltage	V/Hz	220/50	220/50	380/50	380/50
Rated current	A	3.3	4.9	3.8	4.1
Continuous working time	Min	8	8	13	13
Maximum lifting	kg	600	1000	1500	2000

## Accessories

- Auto reset solenoid with fusible link
- Polyurethane painted in RAL Colours
- Audio visual fire control panels which can be connected to photo beams, smoke and heat detectors. Allowing full control over how the shutter will descent in fire condition



# Fire Shutter Test



Before the test



60 minutes of test



120 minutes of test



180 minutes of test



240 minutes of test



270 minutes of test - end of test



Indian Green Building Council  
M E M B E R



ISO 9001 : 2015, ISO 14001 : 2015  
BS OHSAS 18001 : 2007

Gandhi Automations operates a policy of continuous development and reserves the right to make appropriate technical modifications / replacements without prior notice.

# **GANDHI**

Automations Pvt Ltd

**India's No.1 Entrance Automation & Loading Bay Equipment Company**

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