

# INDUSTRIAL DOOR & GATE SYSTEMS



**AUR**



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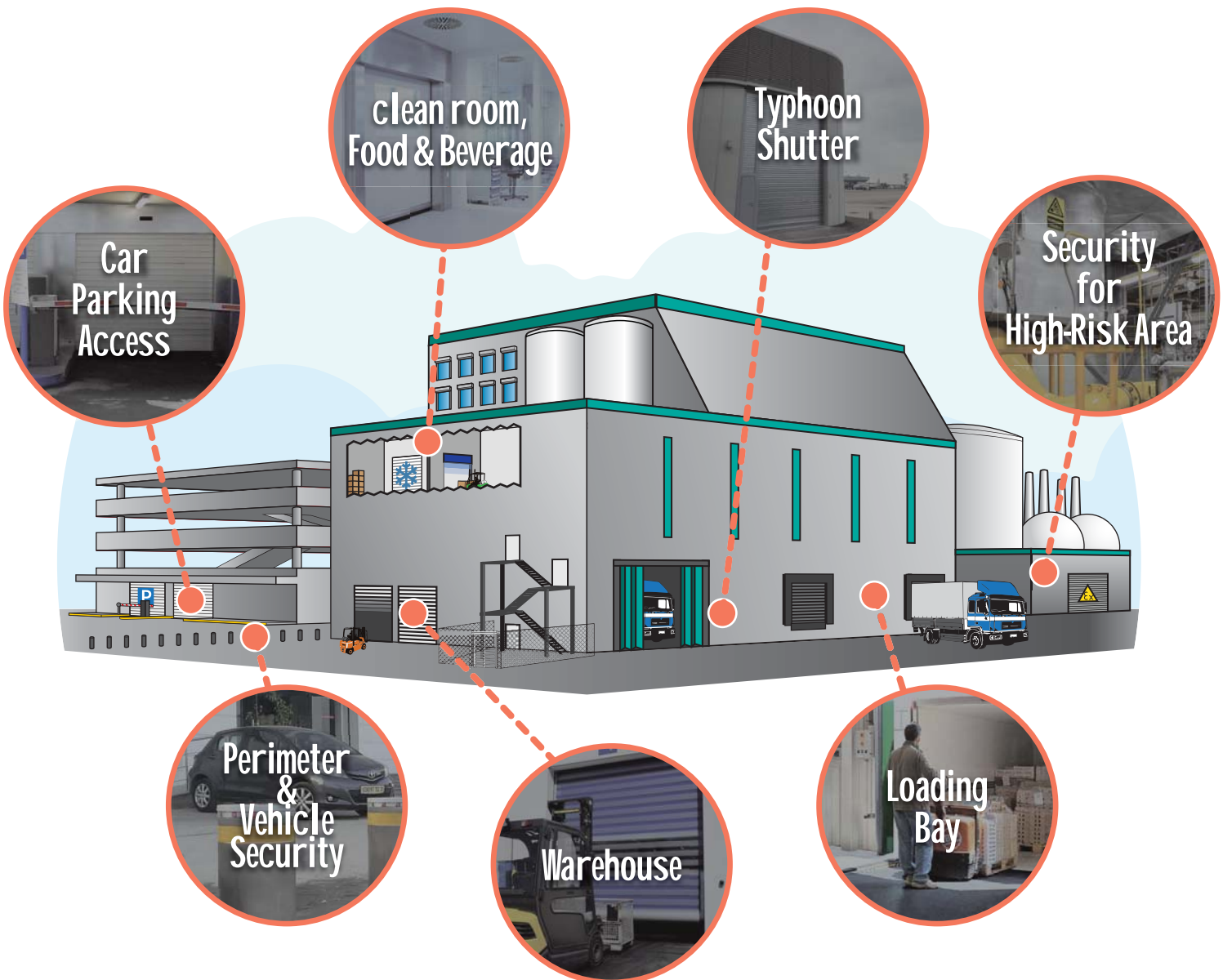
We focus on Commercial, Institutional, Industrial and Residential projects in Hong Kong and Macau.

AUB offers a wide portfolio of Products & Solutions including Automatic Doors, high-performance Windows and Entrance Doors, Security Gates, Industrial Doors, Access Control and Door Hardware & Ironmongery.

Service is our Value - we are supporting our customers with Design Development, Technical Advice & Customized Drawings, Ironmongery Schedules, Master Key Plans, Sourcing, Supply & Installation, Training and Service & Maintenance programs.

Key partners and suppliers include GILGEN Door Systems, EFAFLEX High-Speed Doors, HART Security Shutters, TESA Access Control, TBS Biometric Solutions, SAELZER high-security Doors, AIR-LUX Window Systems and SILBER Doors & Windows and many more.

## Solutions for Industrial Doors & Gates



# Products and Applications

## Warehouse

### Exterior

- High-speed Spiral Door
  - ↳ EFAFLEX EFA-SST® ..... P. 5
  - ↳ EFAFLEX EFA-STR® ..... P. 5
  - ↳ EFAFLEX EFA-STT® ..... P. 6
  - ↳ EFAFLEX EFA-SST® Secure / RC4 ..... P. 7
- Roller Shutter
  - ↳ HART - Typhoon Shutter ..... P. 15
  - ↳ HART - Security Shutter ..... P.13-14
- Folding Door
  - ↳ WE - Typhoon Folding Shutter ..... P. 17
  - ↳ EFAFLEX - High-speed Folding Door ..... P. 18
  - ↳ Gilgen - DBX Series Door & Gate Drive ... P. 19

### Interior

- High-speed Roll-up Door
  - ↳ EFAFLEX EFA-SRT® ..... P. 11
  - ↳ EFAFLEX EFA-SRT®MS ..... P. 10
  - ↳ EFAFLEX EFA-SRT®MTL ..... P. 10
  - ↳ EFAFLEX EFA-SRT®EC ..... P. 11
  - ↳ EFAFLEX EFA-SRT®CR ..... P. 12

## Security for High-Risk Zone

- High-speed Spiral Door
  - ↳ EFAFLEX EFA-SST® Secure / RC4 ..... P. 7
- Roller Shutter
  - ↳ HART - Security Shutter ..... P. 13-14
- ATEX Door
  - ↳ EFAFLEX EFA-SST®EX ..... P. 10
  - ↳ HART - ATEX Certified Door ..... P. 16
- Staff Access Security Gate
  - ↳ Full Height Turnstile ..... P. 21
- High-performance Security Door
  - ↳ SÄLZER High-performance Security Door .. P. 22

## Clean Room, Food & Beverage

- High-speed Roll-up Door
  - ↳ EFAFLEX EFA-SRT®EC ..... P. 12
  - ↳ EFAFLEX EFA-SRT®CR ..... P. 12
- High-speed Spiral Door
  - ↳ EFAFLEX EFA-STT®CR ..... P. 10
  - ↳ EFAFLEX EFA-SST® TK-100 ..... P. 8

## Loading Bay

- Docking Facilities
  - ↳ Kopron - Dock Shelter ..... P. 20
  - ↳ Kopron - Dock Leveller ..... P. 20
  - ↳ EFAFLEX EFA-STT® ..... P. 7

## Typhoon Shutter

- Roller Shutter
  - ↳ HART - Typhoon Shutter ..... P. 15
- Folding Shutter
  - ↳ WE - Typhoon Folding Shutter ..... P. 17

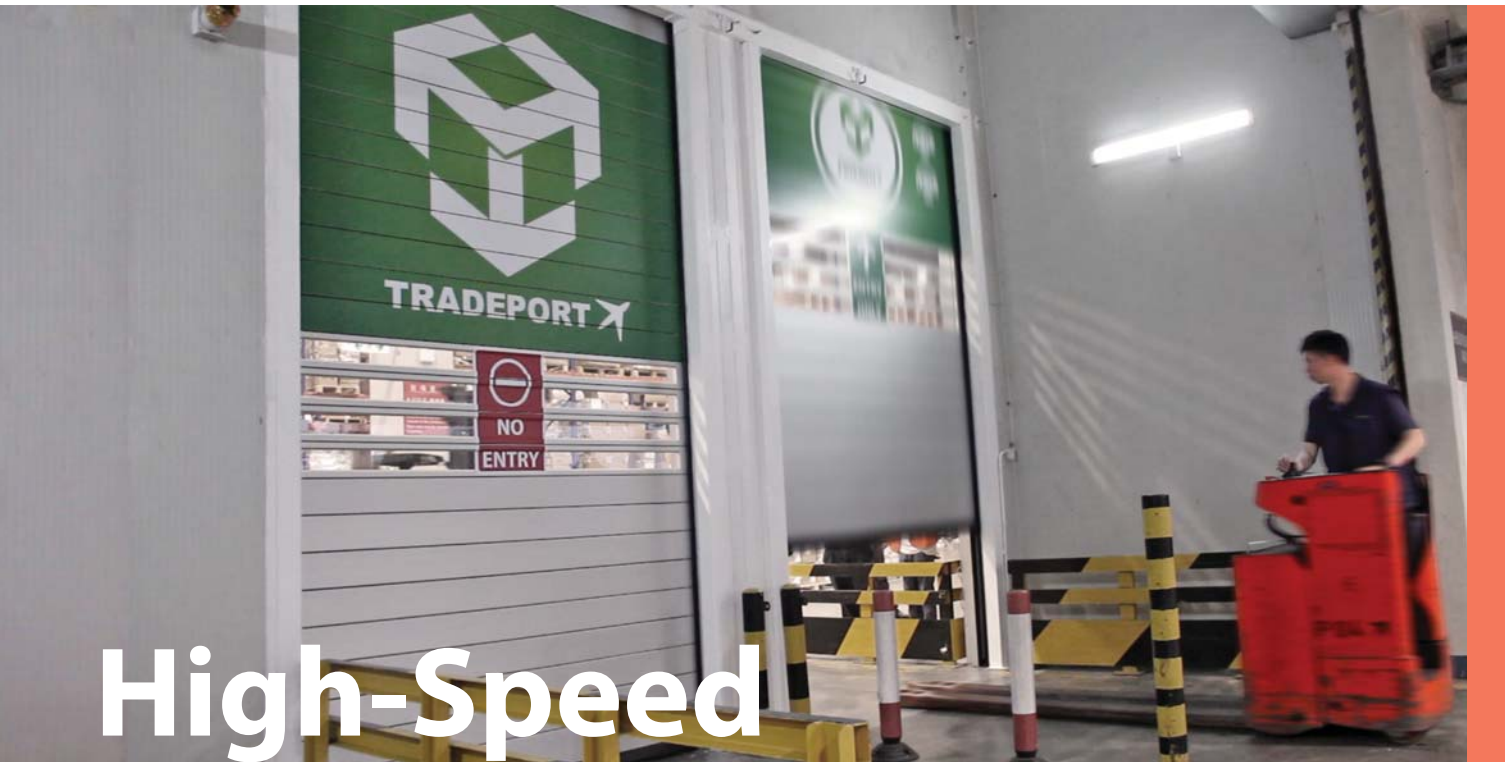
## Car Parking Access

- Parking Solution
  - ↳ EFAFLEX EFA-SST®PS ..... P. 9
  - ↳ SÄLZER Road Blocker ..... P. 23

## Perimeter & Vehicle Security

- Perimeter Security
  - ↳ SÄLZER Road Blocker ..... P. 23
  - ↳ FAAC Security Bollards ..... P. 24





# High-Speed Spiral Door

## The spiral design – speedy, smooth and virtually silent!

Superior in every way, the original design from EFAFLEX remains the world's fastest vertically opening high-speed door. It's unique spiral construction ensures the door opening is super smooth and virtually wear free.

High-speed spiral doors are the globally unique result of many years of research, taking pleasure in innovation and the creative approach to the latest technology. All the doors in these series are based on the EFAFLEX spiral technology. High-speed doors from EFAFLEX in the S series achieve top speeds of more than 4 m/s. No other door with comparable properties even comes close to clearing the way so quickly.

EFAFLEX offers High-Speed Spiral Doors of various different designs, with the circular spiral being the standard solution, boasting the fastest opening / closing times.

## Product features



Unique EFAFLEX spiral Design



Fastest opening speeds – up to 4 meters per second



Exceptional sound and heat insulation



Colour match options available



High performance – up to 250,000 operating cycles per year

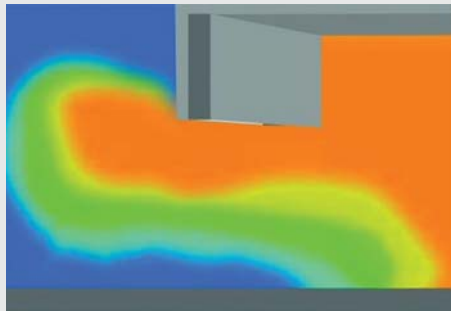


**Highest profitability - due to best quality**

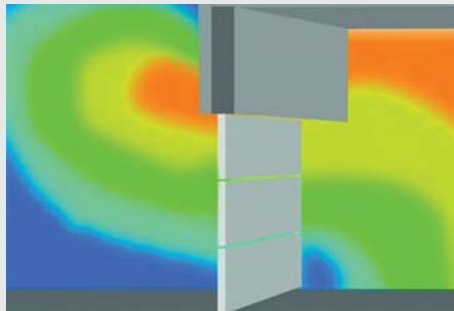
Today, energy as one of the most important factors with regard to profitability is more important than ever before. Due to the fast opening and closing speed of our doors, only few energy gets lost towards outside or between two rooms. By using EFAFLEX high-speed doors, you can efficiently reduce your energy costs.

**Save massively on energy costs**

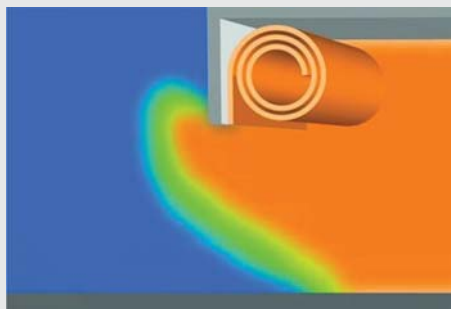
EFAFLEX is the world's first manufacturer to provide a series of thermally insulated EFA-THERM® insulation laths for its doors. The thermally insulated EFA-THERM® laths of the EFA-SST® considerably improve the thermal insulation, thus lowering your energy costs.



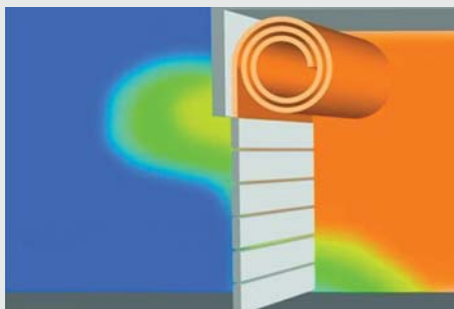
Conventional door:  
Open for a long time



Conventional door:  
Closes Slowly



EFAFLEX High-speed door:  
Open only briefly



EFAFLEX High-speed door:  
Closes fast



Energy saving is automatically included in the EFAFLEX technology. Since the desired temperature – whether warmth or cold – is maintained through the fast opening and closing speeds, the loss stays low. Premium quality pays off – you save permanently. EFAFLEX door systems are primarily designed for use in high traffic areas. In these areas, they are under heavy strain and function reliably at all times. EFAFLEX, the inventor of spiral door technology, guarantees you a long service life.



## The insulated spiral EFA-SST®

The EFAFLEX classic door and our most popular. It features thermal insulation laths as standard, opens at 2.5 metres per second, and capable of operating up to 250,000 cycles per year.

**Standard sizes up to 10 metres x 6.6 metres.**

The SST high-speed door is an extremely fast, safe and reliable exterior door. The door panel consists of double wall aluminium laths, thermally separated profiles provide (on request) for the best in heat insulation. Any required light entry will be constructed as necessary from multi-clearview laths of acrylic glass (SAN). An additional locking device guarantees a high degree of security against burglary. The widest range of equipment and extensive accessories distinguish the high-speed spiral door as the model for the today's door technology



## The turbo spiral EFA-STR®

The turbo spiral door – the world's fastest opening at up to 4 metres per second, capable of up to 250,000 operating cycles per year.

**Standard sizes up to 7 metres x 6 metres. A great all-rounder.**

The EFA-STR® does not only move with an incredible speed but also requires extremely low maintenance, is heavy-duty and extremely stable. The flexible door leaf is led laterally and is moved upwards and downwards in a force-closed manner: Linear expansions are ruled out. It consists of individually replaceable, 4-field module segments. Aluminium profiles reinforce the curtain with a distance of 225 mm.



## The transparent spiral EFA-STT®

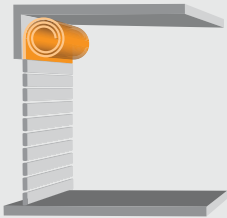
The transparent door leaf that consists of 70% crystal clear acrylic glass. Door opens at 3 metres per second, capable of operating up to 200,000 cycles per year.

**Standard sizes up to 8 metres x 7.8 metres.**

At all passageways in company which are passed through from two directions, the clear view through the door offers decisive advantages: Accidents are prevented and smooth transport operations are guaranteed.

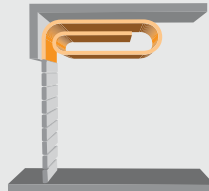
The door leaf of the EFA-STT® is kept in a certain distance in the spiral. Thanks to contact-less winding-up, the transparent laths offer a good view through the door for many years - and with hardly any wear. Therefore, the whole door convinces with a perfect look, even under hard everyday working conditions.

## Opening style for every height



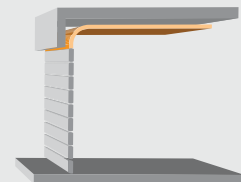
### Round Spiral

The round spiral is the standard and best solution when you have ample space above the door.



### Oval Spiral

Oval spirals are space-saving shapes to be used in cases of structural limitations.



### Low-header

The low-header design guarantees greatest safety for people and vehicles, for example in underground garages and parking centres.

If you only have limited space above the door then there are two space-saving variants to choose from in the S Series.

## Optional Functions



### Slope Solution - Inclined Bottom Bar

Hong Kong terrain is hilly, with many slopes and steep roads. EFAFLEX offer a customized slope panel.



### Self-repairing door leaf Active Crash System EFA-ACS®

The active crash system EFA-ACS® provides safety and short open times guarantee stable temperatures in production and storage rooms. Special machine protection doors also protect systems and people and can be seamlessly integrated thanks to their space-saving, compact design.



# RC4

PARTNER

**EFAFLEX**   
safe high-speed doors

Resistance class **RC4** in accordance with  
DIN V ENV 1627-1630:1999-04  
Patented technology



ROSENHEIM  
Tested and certified by ift Rosenheim

## High-Speed Security Door

Top protection for your assets against burglary, robbery and vandalism – Security without limits The EFA-SST® Secure combines speed with security in a single door solution. It provides maximum protection to the people around you, whilst incorporating the speed of an efficient EFAFLEX high-speed door.

Double-sided automatic locks secure the door during every closing operation, transforming it into a near-insurmountable obstacle. The door fits seamlessly into the structure of the building and features impressive opening and closing speeds to ensure your processes remain quick and efficient, while your valuables stay protected.

Tested and certified by ift Rosenheim in accordance with DIN V ENV 1627-1630:1999-04, the door has attained resistance class RC4 to offer maximum security.





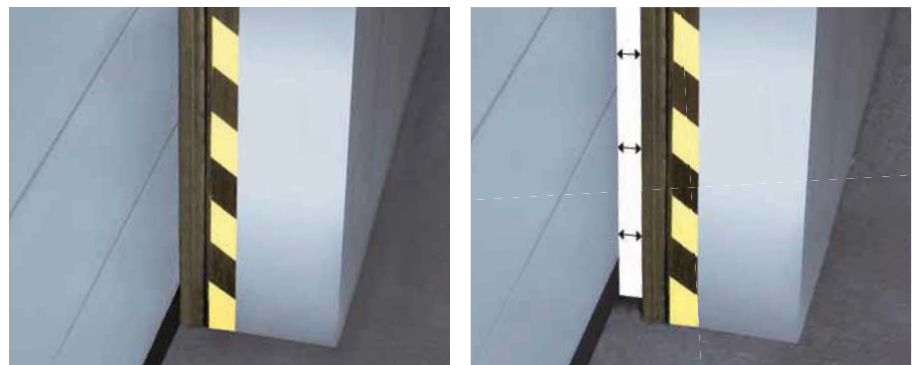
# Cold Storage Solution

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safe high-speed doors

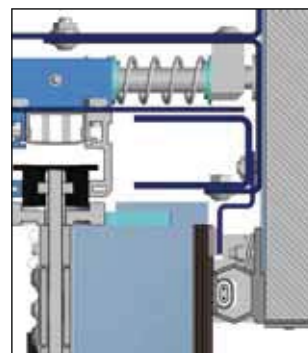
## EFA-SST® TK-100

The first truly single-door solution for deep-freeze areas that simultaneously offers highest possible opening and closing speeds and the best insulation values for spiral doors. The EFAFLEX EFA-SST® TK-100 high-speed door is a high-quality solution for every deep-freeze room.

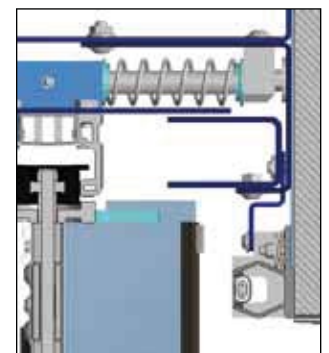
Contact surface heaters are fitted throughout the entire EFAFLEX high-speed door, integrated into the seals around the opening and into the bottom beam. These heat the contact surfaces of the seals where they meet the door blade and floor. In comparison with other door solutions you can save up to 50% on heating costs by using an EFAFLEX deep-freeze high-speed door. The result of this unique design is heat transfer coefficients of as low as  $0.62\text{W/m}^2\text{K}$  in operational temperatures between plus  $30^\circ\text{C}$  and minus  $30^\circ\text{C}$ .



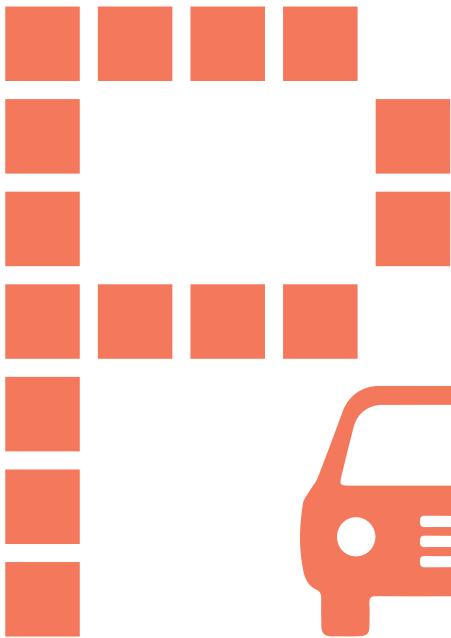
The innovative construction of the EFA-SST® TK-100 features the door seal running all the way around the opening and a dynamic door blade guide. This guide is mounted displaceably against the frames and spiral mount, an active guide rail mechanism (EFA-AFM®) keeps the door blade pushed tight against the door frame and, combined with the seal, seals the door practically hermetically. The 100mm thick EFA-THERM® insulation laths on the EFA-SST® TK-100 guarantee better thermal insulation than ever before. The laths are thermally separated as standard for cold storage rooms.



AFM system closed:  
The door is hermetically sealed.



AFM system open:  
The door blade is in motion.



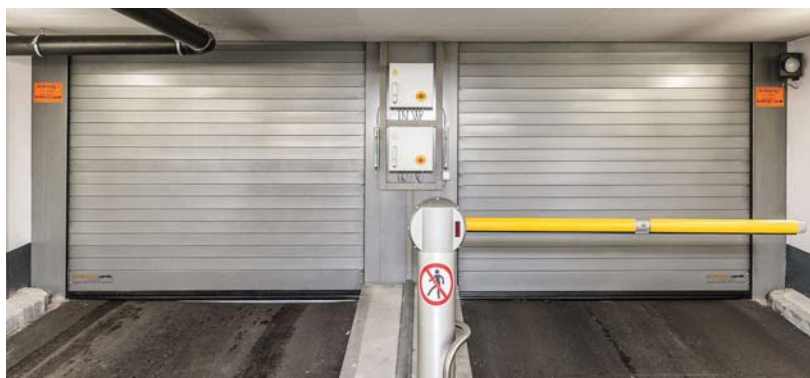
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safe high-speed doors

# Parking Solution

## EFA-SST® PS

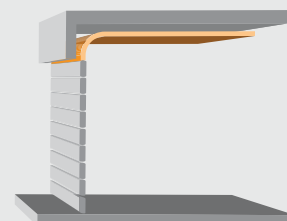
Uniquely fast, secure and reliable – one more characteristic is now going to be added to the known features of EFAFLEX high-speed doors. Once again, our engineers have scored a real coup: They developed the EFA-SST® PS, a space-saving door particularly suited for parking and garage systems. The new construction can be installed even under minimal space conditions in the lintel or side frame.

The EFAFLEX spiral is still an ingenious construction principle. However, in comparison to common spiral doors, the space requirement was significantly reduced by using a compact spiral construction which has been patented several times. The smaller laths (height of 105 mm) also mean that the door can be installed in tight spaces in the lintel.



One's own ambitions are the strongest drive for outstanding performance: Common garage doors are calculated to go through approximately 5 opening cycles a day, but the EFA-SST® PS is dimensioned for 200,000 work cycles a year. That's why no other door can be compared to the EFAFLEX doors concerning durability and capacity.

The external building door opens in mere seconds and closes immediately after the car has passed the door. The EFA-SST®-PS thus prevents unauthorised access and unauthorised cars may not gain entry to the building. Fast and secure doors contribute to safe entries and exits of (underground) car parks of hotels, banks, agencies and other public institutions in particular.





# Spiral Door

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safe high-speed doors

# Explosion-Proof



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safe high-speed doors



## Application

- Industrial e.g. pharmaceuticals, chemicals, hazardous substances and paint shops
- Outdoor installation possible under an on-site canopy
- Suitable for external and internal applications

## EFA-SST® EX

The EFA-SST® EX is excellently suited for both internal and external use. In addition to high operating speeds, it also offers a solid door blade with high wind resistance and optimal sealing. The standard door blade consists of double-walled aluminium laths, which can be supplemented all in or part with optional transparent laths. The door blade is guided by a spiral, without contact minimising wear.

The EFA-SST® EX has been developed in accordance with ATEX Directive 2014/34/EU specifically for use in potentially explosive atmospheres for Zone 1 (II 2G IIB T4 GbX), Zone 2 (II 3G IIB T4 GcX), Zone 21 (II 2D IIIB 135°C DbX) and Zone 22 (II 3D IIIB 135°C DcX). The control cabinet must be installed outside the explosion protection zone.

## Other Industrial Solutions



## Materials Transport and Logistics EFA -SRT® MTL

A versatile design developed specifically for intensive internal industrial logistics processes. Ideal for conveyor belts, confined space applications as either access obstacle or access prevention depending on the nature of the process.

Opening speeds up to 1.5 metres per second, capable of up to 250,000 cycles per year.

Standard sizes up to 3 metres x 3 metres.



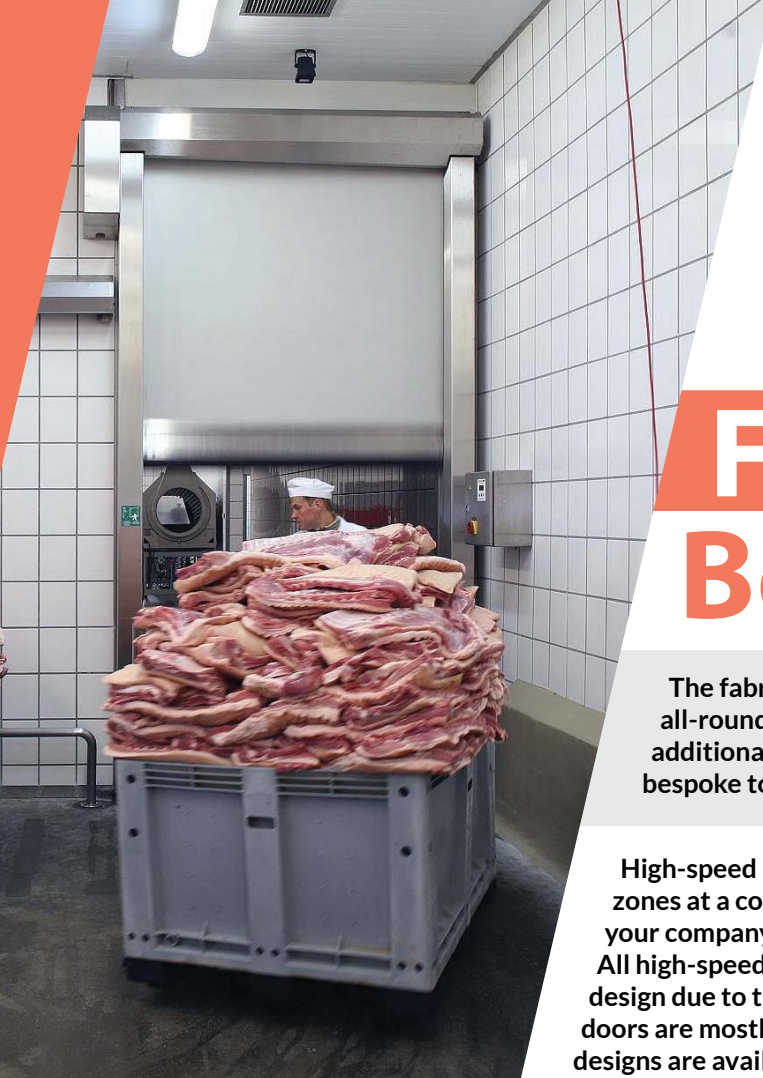
## Machine Protection EFA-SRT® MS

Its space saving, compact design make this product ideal for machine protection areas. With its transparent door curtain and edged with warning stripes as standard. Available as flame resistant and UV protective windows for welding applications.

Opening speeds up to 1.8 metres per second, capable of up to 250,000 cycles per year.

Standard sizes up to 5 metres x 3.5 metres.





# Food & Beverage

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**EFAFLEX**  
safe high-speed doors

The fabric roll-up door is a versatile product; a great all-rounder that is ideal as an interior door and also as an additional hall closure. The style can be manufactured bespoke to fit your application.

High-speed roll-up doors dampen noise, maintain temperature zones at a constant level, and avoid that drafts have a chance at your company!

All high-speed roll-up doors of the R series have a space-saving design due to the door opening. EFAFLEX high-speed roll-up doors are mostly maintenance-free, and different and individual designs are available.



## Heavy duty fabric curtain EFA-SRT®

A high-speed, heavy duty roll up fabric door. Ideal for interior use, with cleanroom and hygiene versions available.

Opens up to 2 metres per second, capable of up to 150,000 operating cycles per year.

Standard sizes up to 6 metres x 6 metres.



## The Hygienic Professional EFA-SRT® EC

EC stands for "Easy Clean"

The optimized solution for all internal passages with the highest hygienic requirements, such as in the production of foods. It fulfils all requirements of the food industry.

Standard sizes up to 3.75 metres x 3.5 metres.

## Special curtains

Three special curtains as option

In addition to the standard curtain, which is made of silicone-free PVC, EFAFLEX also offers three special curtains as option for the EFA-SRT®, which can be used for different applications. All three curtains are made of a transversely stable material and are silicone-free.

- 1 PVC-coated polyester. It was developed for the field of food logistics and is FDA-approved for the transport of dry food.
- 2 Urethane-impregnated polyester material and is the best option if a hardly flammable curtain is needed for the EFA-SRT®.
- 3 Painting plants and is therefore free of substances which are detrimental to paint adhesion. It is also made of urethane-impregnated polyester material.

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*safe high-speed doors*



### **EFA -EAS<sup>®</sup> Crash protection**

If requested, your high-speed roll-up door can be equipped with the EFA-EAS<sup>®</sup> crash protection. This protective equipment prevents expensive damages to a curtain in the case of a crash.

During a crash, the bottom module is pressed out of its guides on both sides. Sensors signalise this to the control and stop the door movement immediately. The door curtain and end shield can be easily restored without using any manual lever. Your door will be ready for operation again after a short time.

## **Clean Room**



### **ISO Class 5 Fast and Robust Clean Room Roll-up Door EFA-SRT<sup>®</sup> CR**

Due to its design and its high air tightness, the standard door for GMP-compatible clean rooms according to DIN EN ISO 14644. The EFA-SRT<sup>®</sup> CR Premium is, of course, also suitable for being installed in clean rooms of other classes.

The CR version of the EFA-SRT<sup>®</sup> CR Premium is ideal for closing rooms with different pressure conditions. Fast opening and closing increase the profitability in clean rooms; this keeps the filter load low and reduces the air loss.

**Classification of air cleanliness of airborne particles certified by German TÜV (Technical Inspection Authority) according to ISO 14644-1.**

### **EFA-STT<sup>®</sup> CR**

When speed is the first priority, you will find no better solution than the transparent clean room door EFA-STT<sup>®</sup> CR. Thanks to the patented spiral, this high-speed door opens and closes reliably with up to 2.5 m/s. It is particularly suitable if the exchange of pressure and atmosphere are to be minimised, e.g. during the inertisation for try fire prevention. Compared with a normal EFA-STT<sup>®</sup>, its tightness in use for clean rooms is achieved by means of so-called labyrinth packings.

The fixed door leaf which is made of single-walled transparent laths is kept in a certain distance during winding up. Thus, the EFA-STT<sup>®</sup> of the CR series remains transparent for many years - also for door sizes of 4x5 metres!



# SR4 Security Shutter Terror Screen



Terror Screen is a large and heavy shutter that offers protection for up to 30 minutes against cutting, drilling, crowbars and axes due to its exceptional robustness. This allow enough time for security teams to arrive on site. Hart's Terror Screen SR1-4 roller shutters have been installed at a number of high security locations worldwide including power stations, nuclear facilities, government buildings and data centres etc.



## Benefits

- Attack prevention
- Security performance
- Asset protection
- Public safety
- Insurance compliance

## Key Features:

- Tested and approved to LPS 1175 Issue 7
- Complies with BSEN 12453:2005, BSEN 12604:2000, BSEN 12635:2002, BSEN 12978:2003
- Maximum width 9m
- Operation by press button or various automatic operators
- Electric/manual locking arrangements



Assessed to ISO 9001  
LPCB ref. no 016



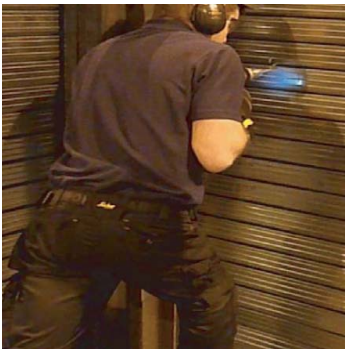
Approved to LPS 1056. LPCB ref.016a/01  
Approved to LPS 1271. LPCB ref.016b/01





## Testing

Tested to LPS 1175 SR4 Issue 7 in January 2014 with full third party certification by BRE/LPCB. The doors were tested from 0.9m wide up to 9m wide. Compliance to the standard requires a minimum of 14 hours of rigorous and thorough physical testing by a team of three people. The actual testing procedure has become progressively more aggressive over time and earlier testing to lower issue numbers would not likely be compliant to Issue 7.



# LPCB®

[www.redbooklive.com](http://www.redbooklive.com)

## Certificate of Product Approval

Certificate Number: 016c

Issue: 02

### Hart Door Systems

Redburn Road  
Westerhope Industrial Estate  
Westerhope  
Newcastle upon Tyne  
NE5 1PJ

is authorised to use the LPCB mark in association with the product(s) listed in this certificate and appendix having complied with the requirements of the standard(s) detailed below:

#### Products

Terror Screen SR1  
Terror Screen SR2  
Terror Screen SR3  
Terror Screen SR4  
security shutters

#### Standard

##### LPS 1175: Issue 7

Requirements and testing procedures for the LPCB approval and listing of intruder resistant building components, strongpoints, security enclosures and free-standing barriers

This certificate and appendix is maintained and held in force through regular surveillance activities

*P. Dillon*  
Signed for LPCB

Paul Dillon  
Verifier

19 September 2016  
Date of Issue

06 June 2014  
Date of First Issue



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**bre**



# Typhoon

# Roller Shutter



Typhoon Grade Insulated Roller Shutter have been specially designed to suit customer requirements for applications under extreme weather conditions. They provide an ideal choice for distribution centers, warehouses or any facility with large openings in weather exposed locations.

# 4kPa

This shutter is designed to comply with the current British and EEC safety regulations. Optional specification levels can be varied to meet any special operational requirements.

Special wind-locks are fitted to each end of every 6th lath to provide additional strength. Extra high-strength guide-stiffeners ensure the structural integrity of the system under high-wind-load.

Customized internal straps to ensure a smooth rolling up.

The bottom lath of the shutter is terminated with a purpose designed weather seal and security sensor strip. Resistance to wind load Class 5 up to 10,000mm width.

### Key Features:

- Resistance to EN 12424 Wind Class 5. Tested minimum pressure resistance of 3,000 - 4,000Pa
- Compliant with prEN 13241-1:2003 & manufactured and installed to iso 9001/2001 and is CE marked.
- Recommended Sizes up to 8m wide x 4m high

### Typhoon Roller Shutter 3kPa / 4kPa

Curtain	3kPa /4kPa Heavy Duty twin skin insulated lath section 3kPa /4kPa Heavy Duty wind end locks
Guide	Re-enforced heavy duty wind lock side channels complete with double brush seals
Guide support	Steel Restraining plates spaced to give support resistance up to 3kPa / 4Kpa
Seals	Double brush seals
Curtain Finish	Standard Galvanised both sides (Powder coating and Plastisol options available)
Wind Resistance	Resistance to EN 12424 Wind Class 5 Enhanced design to meet minimum pressure resistance of 3,000 Pa / 4,000 Pa.
Speed of operation	Approximately 100-150mm per second
Usage frequency	Maximum 6 operations per hour
Operators	Standard Push Button - Hold to Run (other operators available)

## Test Report Summary

Typhoon Testing Report

- Building Compliance Testing
  - Fenestration Product Testing
  - Fenestration Product Certification
  - CE Marking
- [www.buildcheck.co.uk](http://www.buildcheck.co.uk)



<b>Test Nr.</b>	- CW21522-2
<b>Client</b>	- Hart Door Systems Ltd Redburn Rd Westerhope Newcastle upon Tyne NE5 1PJ
<b>Manufacturer</b>	- Hart Door Systems Ltd
<b>Door design</b>	- 4000Pa Laths: 18G Guides: Heavy rated – 4000Pa Bottom Rail: Heavy rated – 4000Pa Wind locks: 6 Per side (every 5 laths so the end locks were close to the stiffening plates) Rivets: Steel for Wind locks and aluminium for lath end locks.
<b>Test Requirements</b>	– 5000Pa wind held for 1 minute
<b>Pressures used</b>	- Starting at 50Pa, increasing, and being held (for 1 minute) at 5000Pa
<b>Test Result</b>	- The door was still operational following the test.
<b>Date of the test</b>	- 16th September 2021
<b>Notes</b>	- Drawings and description of the door construction form part of the test report.

19<sup>th</sup> April 2022



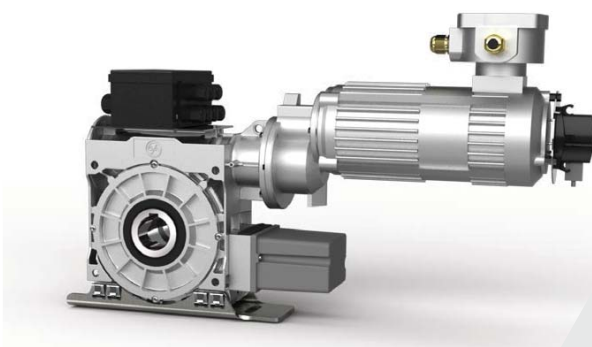
Lee Dearman  
Senior Test Engineer

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<p><small>Build Check Ltd. Registered Office: Thames House Bourne End Business Park, Cores End Road, Bourne End, Buckinghamshire, United Kingdom SL8 5AS VAT Registration No. 861 9946 74 - Registered Number 5282667 England and Wales</small></p>		



# ATEX Roller Shutter

ATEX doors are designed to eliminate all sources of ignition when in operation, allowing safe use in hazardous environments. When fitting roller shutter doors in conditions considered potentially combustible or where possibility of an explosion is present, we advise using an ATEX rated motor and equipment. The ATEX rated motors are sealed units which eliminates potential sources of ignition that can occur in hazardous environments. These hazards can include dust, waste products such as wood shavings, gas and vapour.



## Drive Systems for Hazardous Areas

- ATEX certified
- Safedrive® - Safety Brake incorporated
- Range of output speeds and torques
- Horizontal or vertical mounting
- Hollow shaft worm drive gear with directly driven limit switches
- Controls available for both normal and automatic operation.





**3kPa** **WE**

# Typhoon Folding Shutter

Folding Shutters are controlled by pantograph systems, making them smooth and easy to operate. Excellent for use in extreme weather conditions and suitable for openings of a height of up to 8m meters and beyond, with unlimited widths. Folding Shutters are particularly suited for Fire & Emergency Vehicle Stations, Warehouses and other Commercial and Industrial buildings.



#### Standard Features:

- Manual or electrical operation
- 230mm & 305mm leaves
- Rolled or heavy duty top tracks
- Hasp & staple locking
- Galvanised Finish

#### Options include:

- Polyester Powder Coating to any standard BS or RAL reference
- Brush strips top & bottom of the leaves or both
- Heavy duty bottom tracks
- Key operable locks





# High-Speed

PARTNER  
**EFAFLEX**   
*safe high-speed doors*

# Folding Door

Due to the horizontal folding movement of the high-speed folding doors, the full clearance height is immediately completely free. Doors of the F series open with high speeds and are extremely heavy-duty. They protect against noise and draft air, save energy and convince with good heat and sound insulating properties.



The EFA-SFT® consists of aluminium and steel, a combination which guarantees highest quality standard. The supporting parts of the EFA-SFT® are as a standard made of galvanised steel sheet. The door leaf consists of anodised, corrosion-free aluminium and is equipped with single-walled acrylic glass which allows much daylight to enter the building. As option, double-walled thermopane glazing guarantee an excellent heat insulation of the high-speed folding doors.

Doors of the F series are as a standard equipped with a robust pneumatic drive. This powerful drive has proved many thousand times and was developed until it was perfect. The drive easily performs one million operating cycles and more. If you cannot provide compressed air supply, we can also supply your high-speed folding door with an electric motor.



# Universal Door & Gate Drive System

**GILGEN**  
DOOR SYSTEMS

The DBX universal, functional drive system is modular design that makes the system equally suitable for sliding, up-and-over and folding doors and gates. Automatic operation ensures fast access, and reliable closure after entry or exit helps minimize energy consumption. There are also systems designed to limit access to authorized persons, with tried-and-tested monitoring and safety elements to provide protection for persons and vehicles.

## Robust & reliable:

Designed for frequency use wide range of functions and options ensure that both lightweight and heavy weight doors and gates can be automated according to individual needs and regulatory requirements

## Safe:

Complied all application norms and standard [EN 12453]

## Field of applications:

- Industrial buildings
- Commercial premises and public buildings
- Multi-storey car parks
- Aircraft hangers
- Ambulance-only entrances
- Fire stations
- Public transport depots
- Exhibition centres



Industrial Sliding Door  
DBX-S



Industrial Folding Door  
DBXT-FF



Slide and Folding Door  
DBXT-SF



Up-and-Over Door  
DBX-D





# Loading Bay Logistic Solutions



## Dock Shelter

The dock shelters are the cover of the vehicle when it is docked to the ramp and it is made from a sturdy self-supporting frame designed to absorb shocks caused by possible incorrect manoeuvres. The dock shelters also has the important function of protecting the goods against atmospheric agents and reducing heat dispersion.

These structures also create positive effects on the health of personnel in charge of loading/unloading, as they provide protection against bad weather conditions and air currents.



Standard Raised Dock Shelters

Dock Tunnel Isothermal Portals

Dock House Isothermal Portals

Flexible Sides Dock Shelters

Inflatable Dock Shelters

Isothermal Portal With Fixed or Adjustable Cushions



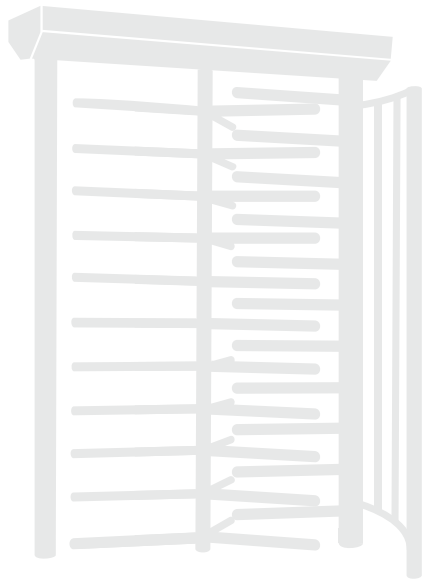
## Dock Leveller

The Kopron dock levellers, designed to compensate any unevenness between the loading bay of the warehouse and the different heights of the vehicle floors, have been developed and manufactured in accordance with European norms and therefore marked CE.



Telescopic Lip

Swinging Lip



# Full Height Turnstile



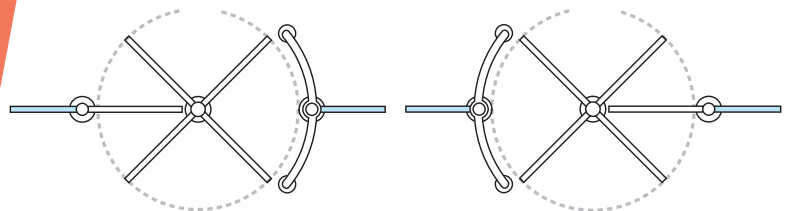
Thanks to its refined design, robust structure and motorized mechanism, the full-height turnstile offers an elegant and rugged obstacle able to withstand break-in and tampering attempts.

The full-height turnstile is a safe and secure barrier. It is equipped with a strong and reliable mechanism consisting of a brushless motorized unit and latest generation electronics able to communicate with wireless or wired control units. It can also be equipped with back-up batteries for continues operation in case of lack of power.

## Application areas

- Production sites
- Construction sites
- Military bases
- Hospitals
- Swimming pools
- Sports complexes
- Parking facilities

Standard IP rating: IP21  
(Can be upgraded to IP54 for the top-mounted electronics and motors)



Left Version

Right Version





Part of Schüco

Combined Protection against  
Forced Entry, Ballistic Attacks,  
Fire, Smoke and Explosion



# High-performance Security Door

SÄLZER security doors in steel and aluminium for protection against the most diverse threat scenarios with numerous functional combination options and in multiple design variants. Flexible and modular security system for all types of doors, security requirements and designs.



**Forced entry resistance**  
up to class RC5 resp. RC6  
(in steel)



**Bullet resistance**  
up to class FB7-NS



**Blast resistance**  
up to class EXR5-NS, additionally  
tested with 100kg, 200kg and  
500kg of explosives, also with  
long pressure duration up  
to 4.500ms (GSA2)



**Fire and smoke protection\*\***  
up to class T90/EI90, S<sub>200</sub>,  
BS 476 Part 22, 120min.

SÄLZER has developed a multifunction doors, which combines a range of different security requirements. Architects, designers and high-risk property owners are familiar with the problem: on the one hand doors have to offer protection against fire and smoke, on the other hand the door must withstand ballistic, forced entry or blast attacks. Often the entrance doors are the emergency exit and anti-panic locks have to be installed. Additionally the door should be architecturally pleasing and should allow for large glazing and slim profiles

The security of all SÄLZER products is documented by certificates from accredited testing institutes, complemented by continuous internal and external quality controls. SÄLZER complies with the following recognized industrial standards:

- Certified quality according to ISO 9001
- External quality control by (amongst others) PfB Rosenheim
- ECOSYS Certification: Occupational security BS OHSAS.18001 / environmentalprotection ISO 14001
- Registered at the association for the pre-qualification of building companies e.V., Reg.-No. 011.080020



# Road Blocker



- ◀ Mobile Road Blocker with removable axle for easy transport.
- ▼ Fixed Road Blocker is flush to the surface of the roadway in closed position. In opening position: standard height 900 mm.



Recent attack scenarios have tragically revealed the urgent necessity to integrate the security of access roads to buildings and public areas in any effective security concept.

## SÄLZER wedge barriers are designed for maximum perimeter entry security

SÄLZER anti vehicle barriers for maximum ram protection up to class K12 or PAS 68. Low depth of only 400 mm ("flatbed barrier"). Optional emergency-up control, closing the barrier within 1 second, thus protecting against attacks by heavy trucks, cars or bikes. System available also for rental. Terrorists and criminals use all methods available to reach their targets. SÄLZER barriers offer highest protection for this kind of threat.

Fixed Road Blocker	
Standard	K12/Pass (15,000 lbs/50 mph, impact load: 1,695kJ) ASTM F2656/F2656M-15 and PAS 68 (impact load: 1,852kJ)
Sizes	Standard foundation: 400 mm Standard barrier height: 900mm Standard barrier width: From 2,700mm up to 4,000mm, other sizes on request
Open and closing time	2 - 10 seconds Optional emergency function: 1 seconds

Mobile Road Blocker	
Standard	K4/Pass (15,000 lbs/30 mph, impact load: 610kJ) K8/Pass (15,000 lbs/40 mph, impact load: 1,085kJ) Option: K12/Pass (15,000 lbs/50 mph, impact load: 1,695kJ), for this additional fasting is necessary
Sizes	Clearance width: 3.60 m Optional greater width: 4.80 m or 6.00 m Barrier Dimension: 4.40m(W) x 0.80m(H) Complete barrier width: 4.40 m x 2.00 m
Open and closing time	3 - 5 seconds
Weight	4,8 t



# FAAC



## Security Bollard



FAAC has a wide range of bollards for residential, commercial and industrial applications - from securing car parks to protection from ram raids. We supply hydraulic, semi-automatic and fixed versions of many of our range. Our bollards have a number of uses which predominately fall into the following use cases:

- Control of road traffic
- Protection of property or equipment
- Prevention of ram raid type attacks on property
- Perimeter security type applications

### CRASH TEST



Standard		PAS 68:2013	IWA 14-1:2013	ASTM F2656/ F2656M - 18
Mass	Target	7500 ± 150kg	7200 ± 400kg	7200 ± 150kg
	Test		7350 kg	
Speed	Target	80 ± 5 km/h	80 (78÷84) km/h	80 (75÷∞) km/h
	Test		79.6 km/h	
Angle			90°	
Major debris			0.8 m (≥ 25 kg) beyond	
Vehicle penetration		1.0m	1.3m	1.0m (P1 class)





# 360° Maintenance & Services

We understand the importance of maintaining safe and secure access in and around your premises. We service and repair Automatic door, Sliding window, Security gate, Roller shutter and other categories to ensure your building is secure and your people are safe.

## 100% Caring Of Your Investment

By choosing AUB Service, you are supported by our technician team of local, accredited and fully trained & equipped engineers. All enquiries are routed through our professional hotline providing you with a single point of contact and fast response times. We shall assign a technician who takes ownership in handling a particular customer. Our technician has the knowledge and is familiar with the location/ premises, perfect understanding of customer expectations, rules and behaviors and shall provide the best solution to our customer.

## Preventive Maintenance

It helps prevent accidents, reduces breakdowns and prolongs the life of the door operator. There are also legal implications regarding the servicing of specific door types, to ensure the safety of users at all times. Whether you are a small independent or large corporation, we can provide a tailored solution around your individual requirements.

## Expert Assistance

Our service team is being trained by our long-term suppliers and partners. We find the root cause and fix it in a proper way to ensure our client experience the best performance of the system. Based on our experience, 85% of malfunction cases were being fixed without replacing a spare part.

## Original Manufacturer Spare Parts

Original spare parts come with warranty. All our spare parts are sourced from the original manufacturer. We never sell any spare parts from unknown source as this might induce negative effect to the entire system.

## Free Site Inspection

For the customer with a service contract, we shall provide free site inspection for any malfunctioning system even of other brands.

## E-Call Service

4hrs Quick Response \*Only apply on Platinum Service Plan. For the Premium customer, our quick response on-site service shall protect your premises from suffering for waiting, breakdown or malfunctioning system.

## Tailor Made Packages

Do you have any other requirements? Please let us know so we can create a package specially for you.

\*Terms & Conditions apply \*AUB Limited reserves the right of final decision





# Maintenance Packages

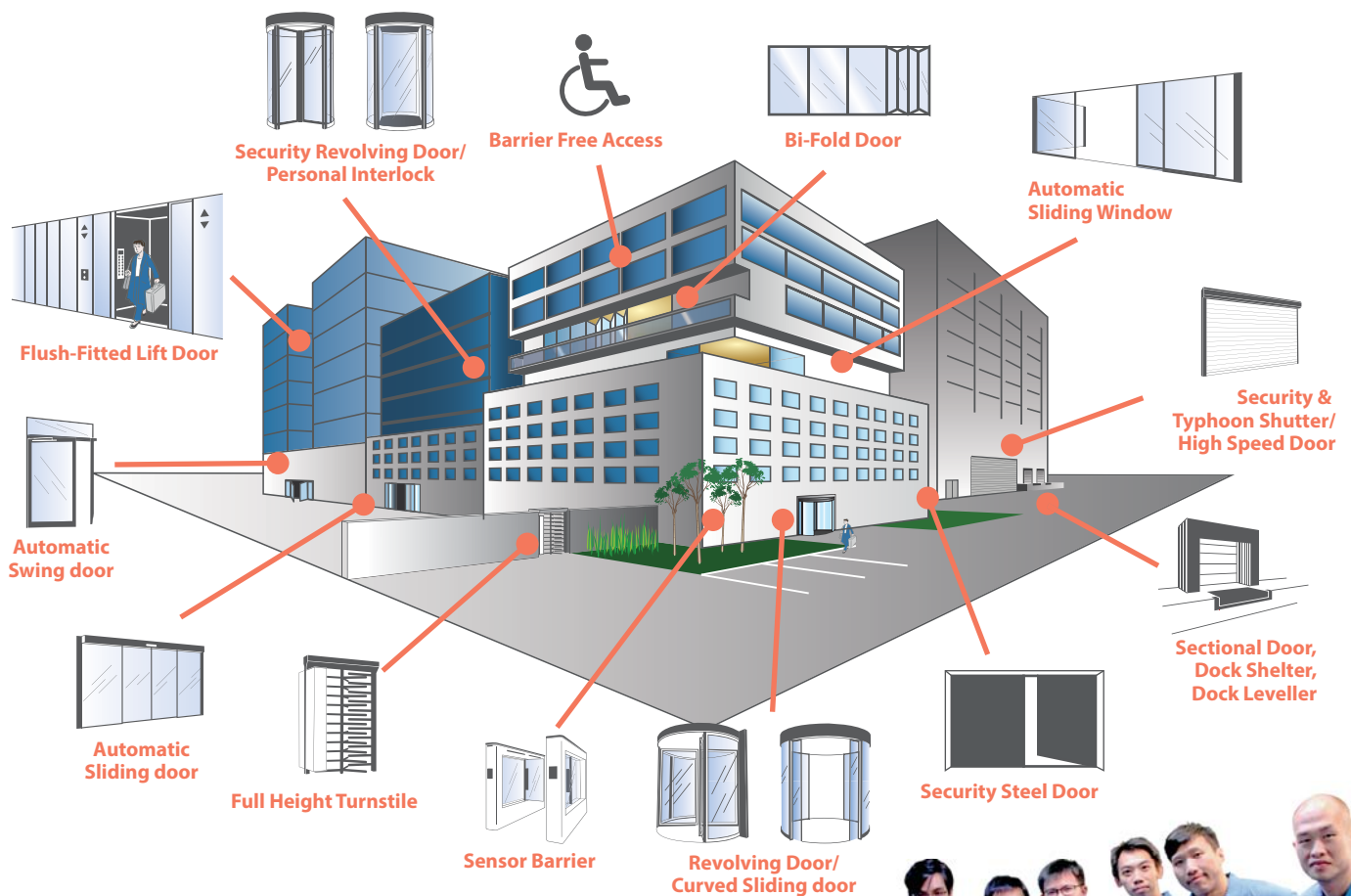
Regular, preventive maintenance of your system is a basic requirement when it comes to long years of reliable operations.

	Basic	Gold	Platinum
Service Hotline	✓	✓	✓
Site inspection	✓	✓	✓
Maintenance record	✓	✓	✓
Inspection Report & Technical advice		✓	✓
Preventive maintenance	Annual / Every 6 months	Every 3 months	Every month
Corrective maintenance	Office hour*	Office hour*	office hour and *Non-office hour
Call-out service	48hrs	24hrs	4hrs
Service report			✓
Special discount		✓	✓

\*Terms & Conditions apply

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## Maintenance - a Wide Range of Products and Applications



**GIVE US A CALL!! 6688-2511**

**TAKE ADVANTAGE OF OUR  
LONG YEARS OF EXPERIENCE**





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