Product datasheet

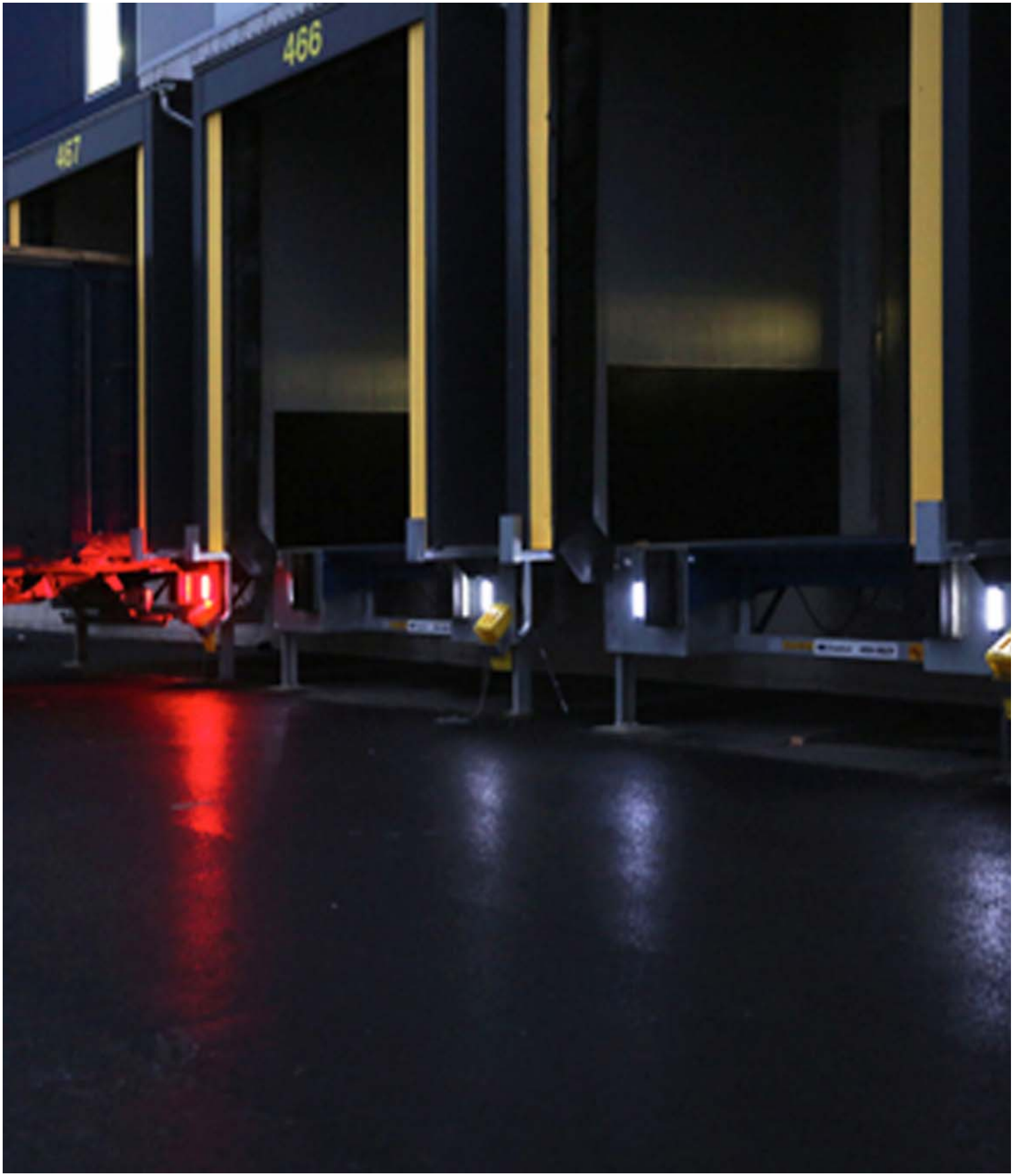
Docking

Crawford Docking equipment

ASSA ABLOY

ASSA ABLOY Entrance Systems

The global leader in door opening solutions



Copyright and Disclaimer Notice

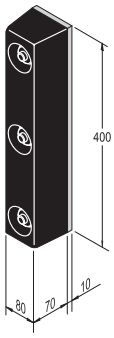
Contents

1. Equipment

1.1 Buffers

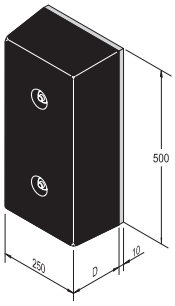
Buffers placed in front of the dock leveller absorb the energy of a vehicle that accidentally or intentionally hits the building. Buffers are available in various sizes, in fixed or moving models, and with rubber finishing or steel plate and spring function.

1.1.1 RS



Application
The RS buffer is the economical solution for docking stations where vehicles of equal sizes load and unload.

1.1.2 RB

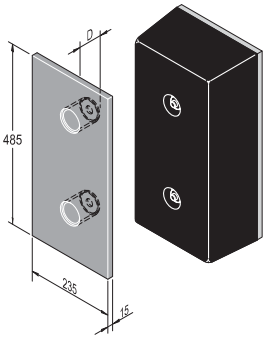


Application
The RB buffer is a large fixed rubber. It is the universal building and vehicle protection solution.

Available depths:

- 90 mm
- 140 mm

1.1.3 RB with steel front plate

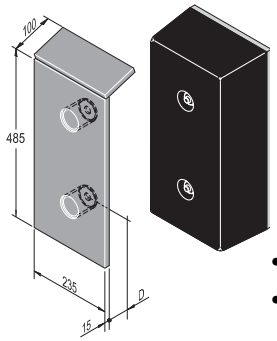


Application
The RB buffer with steel protection front plate increases the building protection and the buffer service life.

Available depths:

- 90 mm
- 140 mm

1.1.4 RB with steel front and top plate

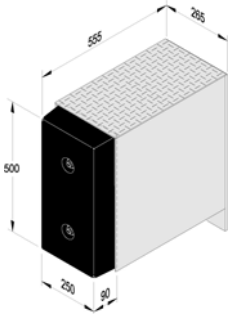


Application
The RB buffer with steel protection front and top plate is designed for vehicles with high lorry beds like interchangeable open bodies and containers.

Available depths:

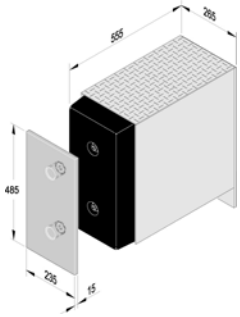
- 90 mm
- 140 mm

1.1.5 RB with steel construction



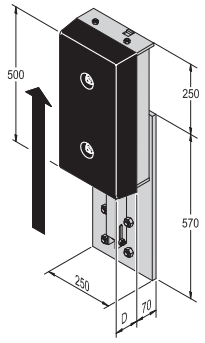
Application
The RB buffer with steel construction is designed to create a security gap between your dock leveller with 1000mm telescopic lip and the truck.

1.1.6 RB with steel construction and steel front plate



Application
The RB buffer with steel construction is designed to create a security gap between your dock leveller with 1000mm telescopic lip and the truck. The steel protection front plate increases the building protection and the buffer service life.

1.1.7 EBH

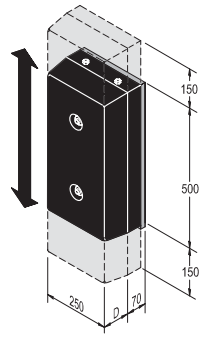


Application
The EBH buffer is the ideal solution for docking stations where vehicles of notable height differences load and unload.
This buffer can be vertically adjusted by a 'release device'.

Available depths:

- 90 mm
- 140 mm

1.1.8 EBF

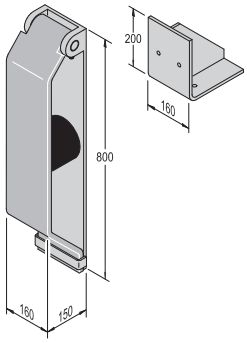


Application
The EBF buffer is the ideal solution for docking stations where vehicles are expected to make notable vertical suspension changes when loading or unloading.
This buffer follows vertical movements of the vehicle.

Available depths:

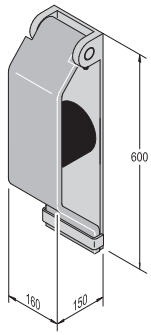
- 90 mm
- 140 mm

1.1.9 Steel spring buffer 800



Application
The 800 mm steel spring buffer is designed for applications where vehicles generally are higher than ramp level.

1.1.10 Steel spring buffer 600



Application
The steel spring buffer is the ideal protector of the ramp as well as the vehicle itself.

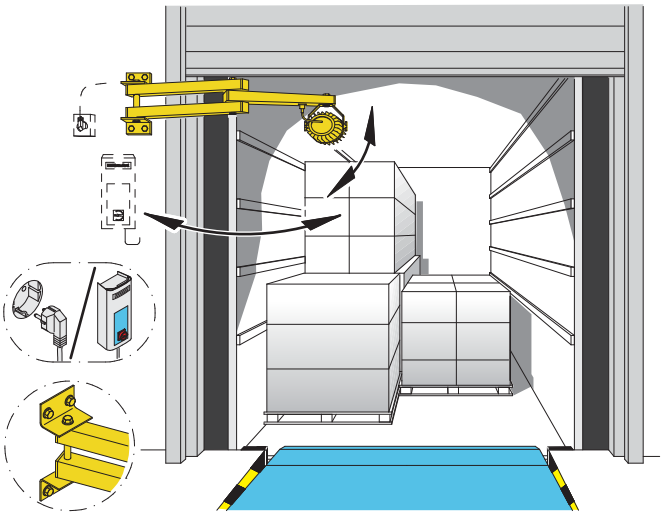
1.2 Crawford DE6090DL Dock light Heavy Duty LED

1.2.1 Application

Where dock lights are often a vulnerable object in the docking area, the virtually indestructible Dock Light Heavy Duty LED is the perfect solution to bring light in the truck and docking area. It is designed for the most demanding environments and can withstand possible hard hits from a moving forklift without being damaged. The housing is made of cast aluminum, combined with a shatterproof polycarbonate lens cover. With a protection class of IP66 it is dust tight and able to withstand water spray. The 18 Watt LED technology gives the Dock Light Heavy Duty LED a long life time combined with low energy consumption while providing extensive illumination.

Standard Installation with arm

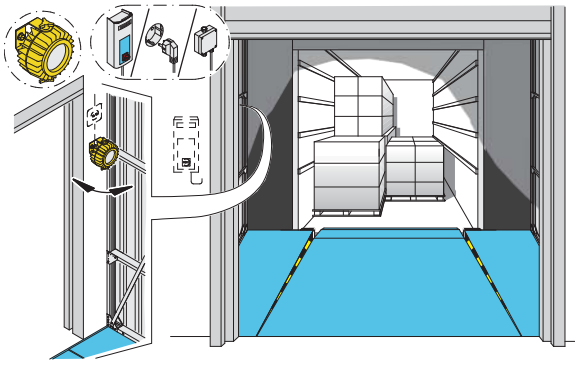
Due to its flexible arm the Dock Light Heavy Duty LED is easy to install inside the building next to the loading bay. The easy to adjust solid construction ensure a good lightening to every corner of the truck.



The Crawford Dock Light LED is easy to install inside the building next to the loading bay and will lighten every corner of the lorry due to its flexible arms. The transformer is completely sealed and protected against dust and splash water. The lamp cover is made of metal and has a wide handle.

Alternative installation direct to the wall

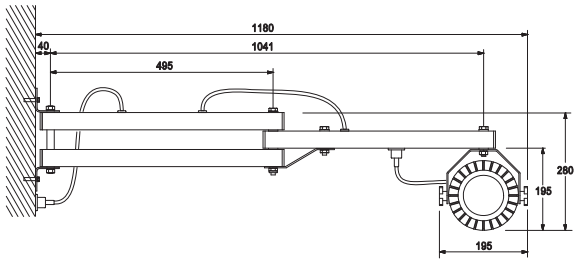
In a loadhouse application the Dock Light Heavy Duty LED can be installed on the outside wall of the building next to the loading bay door. This position and the unique durable construction makes the Dock Light Heavy Duty LED the perfect solution to bring light in the docking area.



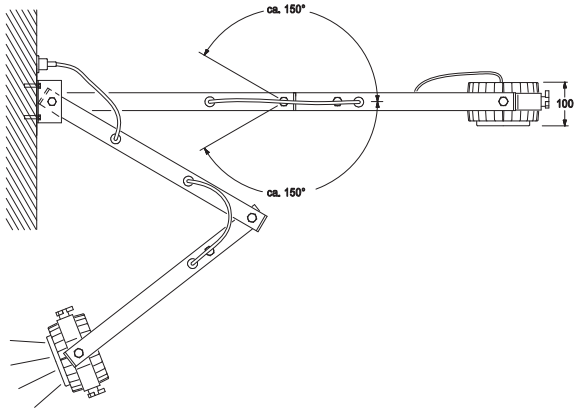
1.2.2 Specifications

- 18 W LED lamp
- More than 60.000 hours life time in typical applications
- Protection Class: IP66
- Cast aluminum housing
- Shatterproof polycarbonate lens cover
- Connection 230 V AC with plug
- Cable length 2 m

1.2.3 Side view



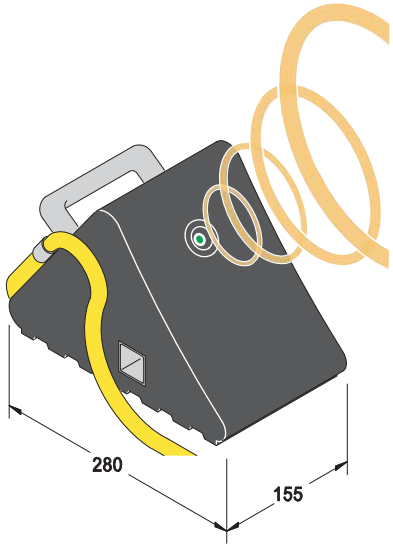
1.2.4 Top view



1.3 Crawford DE6090WC Wheel chock

1.3.1 Application

The wheel chock is designed to improve safety at the docking station. It has a sensor to detect the vehicle position and correspondingly authorises the dock leveller control unit to be operated or not. The wheel chock is connected to the control unit via a fixed junction box. It also prevents the vehicle from rolling away uncontrolled.



1.3.2 Mode of operation

1.3.2.1 Start docking

Only once the chock has been securely positioned against the vehicle tyre, the control unit is released to be operated manually.

1.3.2.2 Finish docking

When the platform is not under load the leveller has to be returned to cross-traffic position and the wheel chock can be removed and placed in the designated wall support.

1.3.2.3 Optional traffic lights (inside and/or outside)

Optional double lens traffic lights are available for further safety. When the chock is in position the traffic lights inside the building will turn green to allow the loading process to be carried out. Outside the building traffic lights will turn to red to indicate that the truck may not move away.

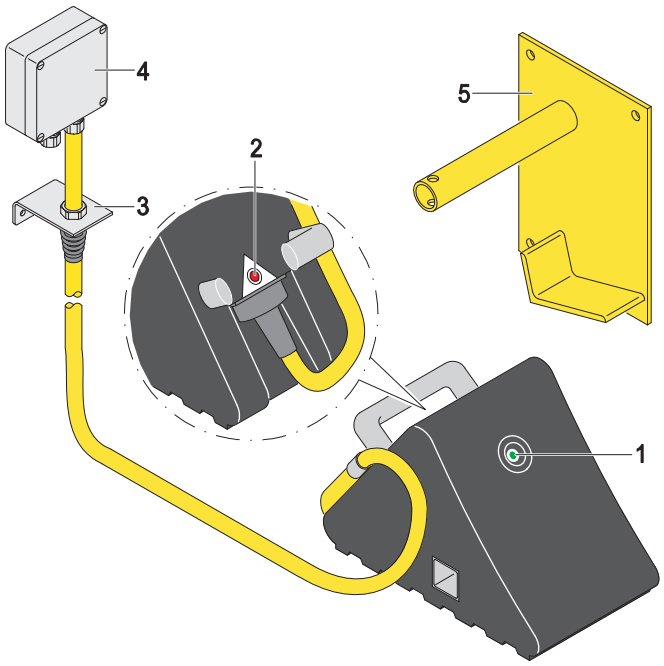
When the chock is not positioned against the vehicle tyre the inside traffic lights will be red indicating that no vehicle has docked safely at the loading bay. Outside the building, traffic lights showing green indicate that a vehicle may move to the dock leveller.

1.3.3 Advantages

The advantages of the wheel chock over other safety systems are:

- It can be used for all types of vehicles
- It is easily installed at any time with no previous preparation needed

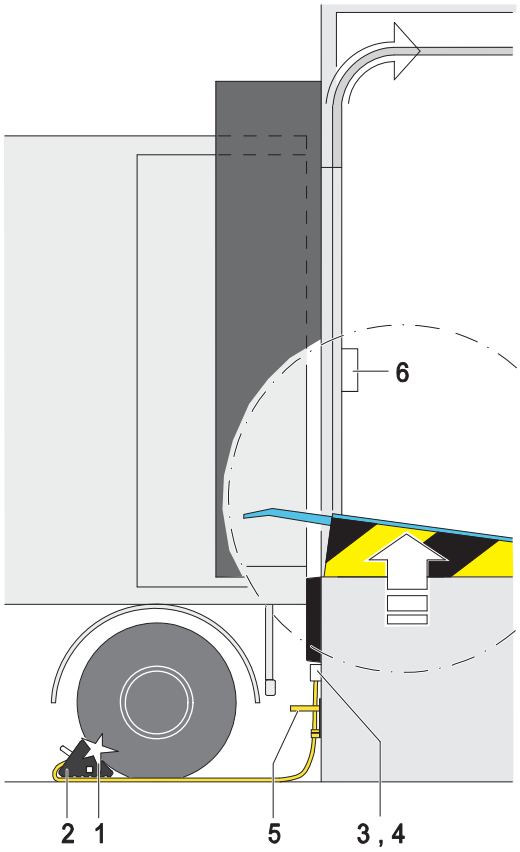
1.3.4 Overview



The wheel chock contains the following elements:

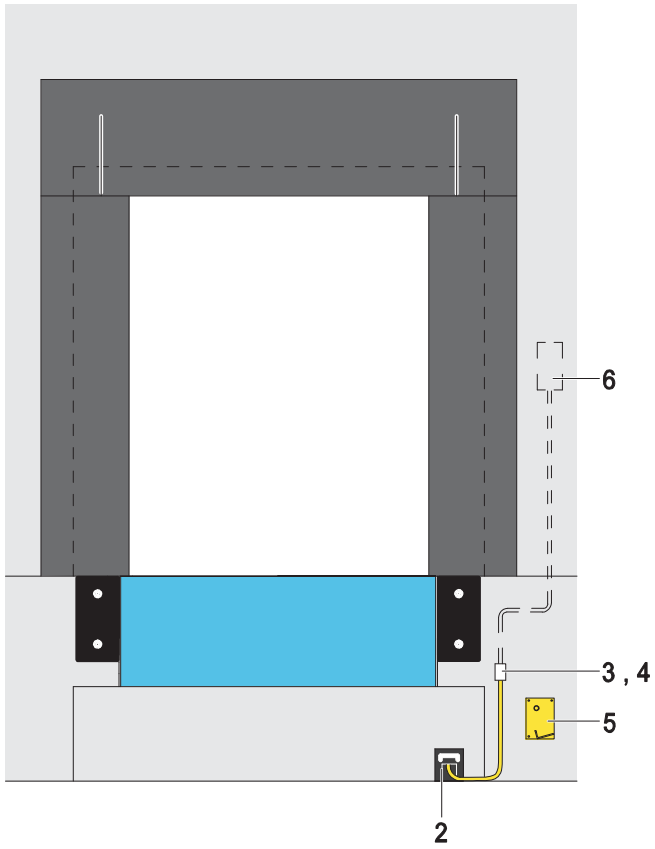
1) Wheel chock (IP 67) with sensor
2) Feedback diode
3) Wall fixation for cable
4) Fixed junction box (IP 55)
5) Wheel chock wall support

1.3.4.1 Side view



1) Sensor
2) Wheel chock
3) Wall fixation for cable
4) Fixed junction box
5) Wheel chock wall support
6) Control unit dock leveller

1.3.4.2 Front view

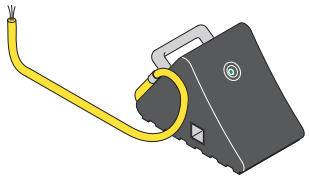


1) Sensor
2) Wheel chock
3) Wall fixation for cable
4) Fixed junction box
5) Wheel chock wall support
6) Control unit dock leveller

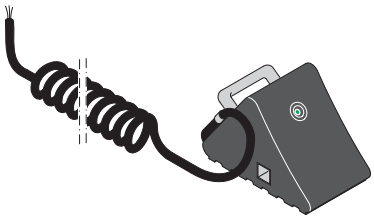
1.3.5 Cable

The wheel chock is equipped with a 10m yellow cable (1). Options of a spiral cable (2) or an automatic roller cable are available (3).

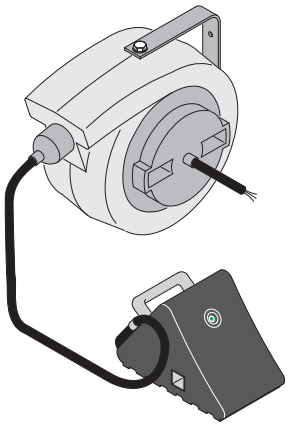
(1) 10m rigid cable



(2) 3m spiral cable, extendable to 7m



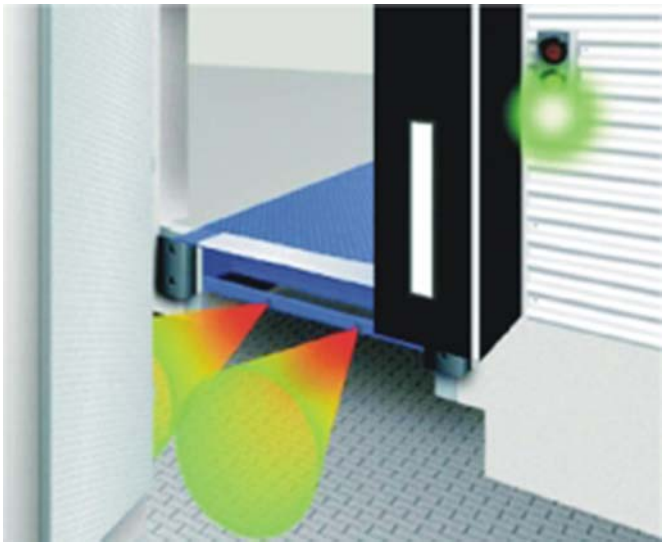
(3) 10m cable on automatic roller (IP 55)



1.4 Crawford DE6090E Eye

1.4.1 Application

There is certainly no lorry driver who does not know how difficult it is to back up exactly at a loading bay. The last centimeters are crucial for damage on the vehicle, the building facade or the loading bay. The Crawford Eye provides a safe and time-saving solution to this problem.

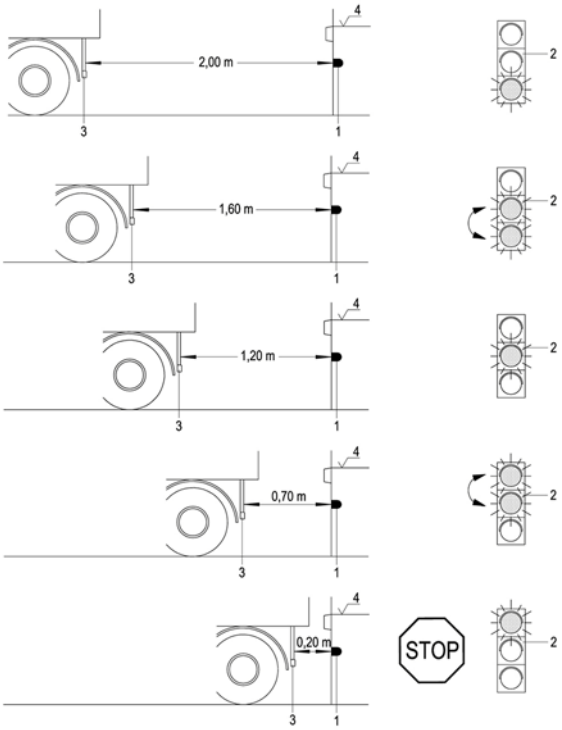


1.4.2 Advantages

- Prevents damage to the lorry, the facade and the loading bays.
- Considerable time savings for the last centimeters of the docking process.
- The sensors also recognize people that may be between the lorry and the ramp.
- The controller of the loading bay can switch the traffic lights green when the loading or unloading process is completed. This prevents dangerous early departure of the vehicle.
- The Crawford Eye is compatible with any brand of docking station, even if already installed.
- Return on investment (ROI) within one year.

1.4.3 Mode of operation

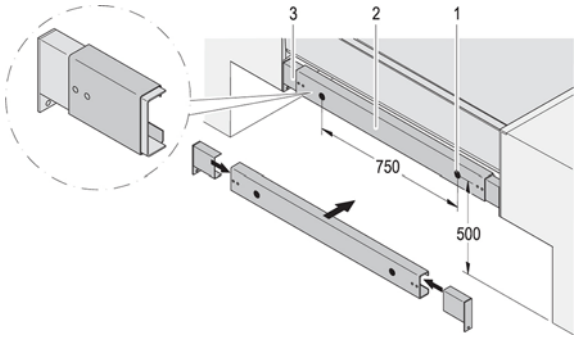
The Crawford Eye consists of a sensor unit which is mounted in a protected position beneath the dock leveller. This sensor unit controls outside traffic lights which in turn indicate the lorry driver the distance to the ramp in five distance steps.
During the docking process the traffic lights switch from GREEN to YELLOW and then to RED. With the red light the lorry has reached its exact docking position.



1.4.4 Installation requirements

To make sure the Crawford Eye is able to measure a vehicle, the sensors must be installed at least 500 mm above yard level and 750 mm apart from each other.

1.4.5 C-profile



1) Sensor
2) Mounting angle
3) Holder for mounting angle with flange connection

1.5 Crawford DE6090TS Traffic light system

1.5.1 Application

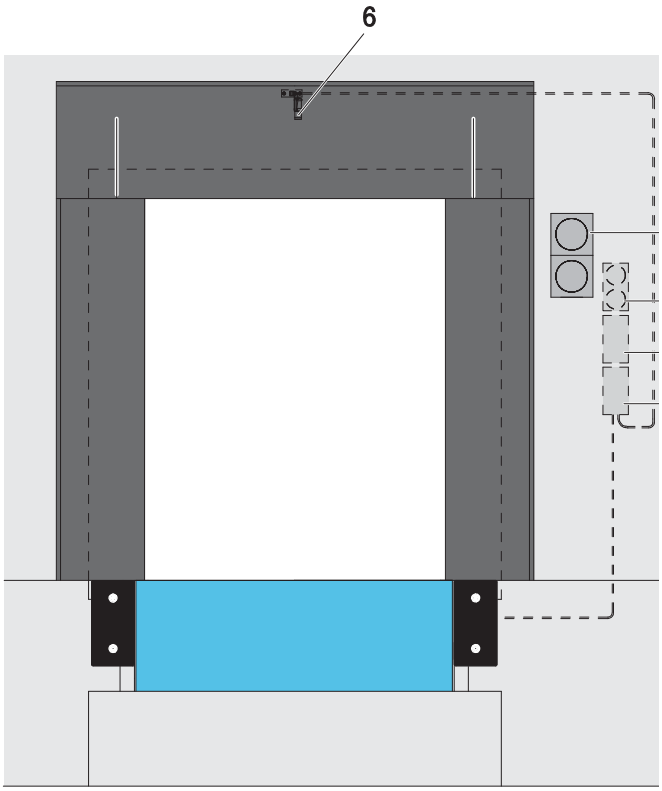
The traffic light system can be used either as a stand-alone application or in combination with door/leveller interlocking.

1.5.2 Mode of operation

The traffic light system either has a sensor above the dock leveller that measures the presence of the vehicle or it is a wheel chock that detects the vehicle.

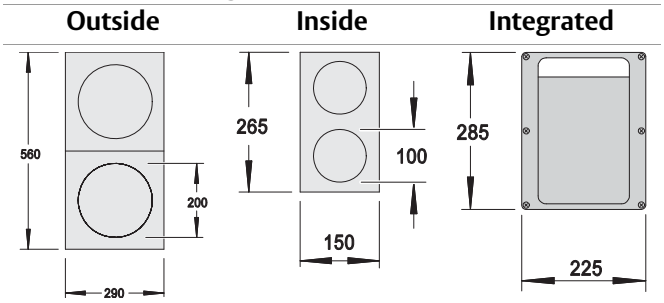
If there is no vehicle (dock leveller is free), the traffic light inside is red, outside is green.

1.5.3 Frontal view



1) Traffic lights outside (IP 54)
2) Traffic lights inside (IP 54), only for control unit without integrated lights (pos. 3)
3) Control unit traffic lights without integrated lights
4) Control unit traffic lights with integrated lights (IP 54)
5) Control unit dock leveller
6) Sensor

1.5.4 Traffic lights



1.5.5 Function of traffic light system with vehicle detection

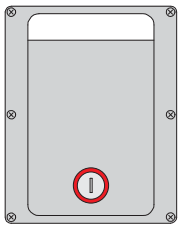
Without lorry	• Sensor gives no signal • Traffic lights outside: green • Traffic lights inside: red
With lorry	• Sensor gives signal • Traffic lights outside: red • Traffic lights inside: green

1.5.6 Function of wheel chock with traffic light system outside / inside

Wheel chock in position	• Traffic lights outside: red • Traffic lights inside: green • Operation of leveller unlocked
Wheel chock not in position	• Traffic lights outside: green • Traffic lights inside: red • Operation of leveller locked

1.5.7 Override interlock key switch

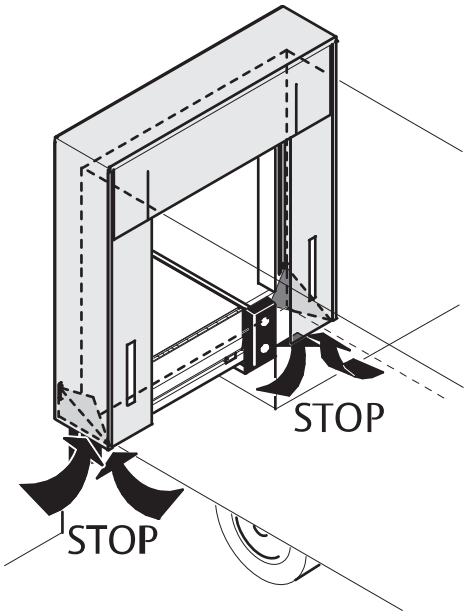
An optional key switch can override the door/leveller interlocking function.



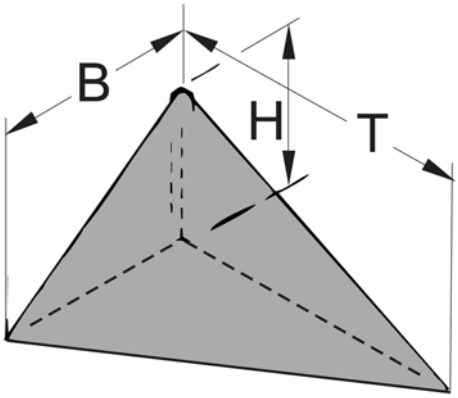
1.6 Corner seals

1.6.1 ES

The corner seal ES is designed to improve thermal efficiency and prevent draughts at the bottom of the side curtains of the dock shelter.



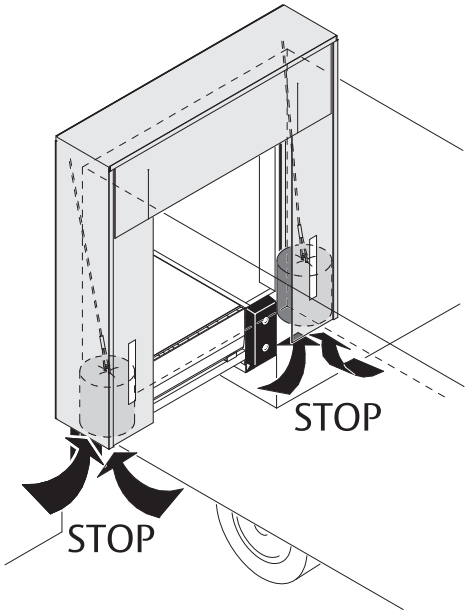
1.6.1.1 Dimensions



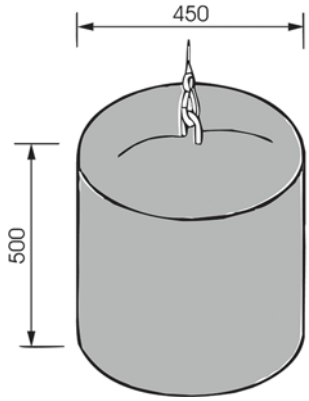
Nominal depth	Width (B)	Depth (T)	Height (H)
600	400	590	300
900	400	890	300

1.6.2 ESR

The corner seal ESR is similar to the ES but are drum shaped and have a flexible spring connection to the top frame of the dock shelter.



1.6.2.1 Dimensions



1.6.3 Specifications

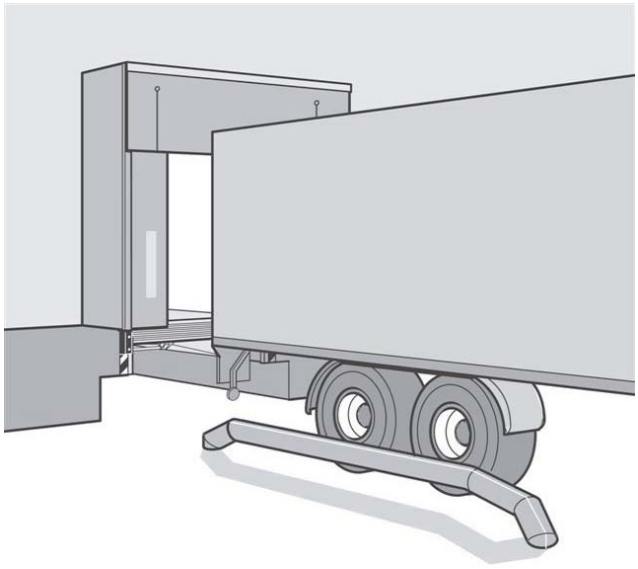
The corner seals are made of foam blocks with a tough plastic cover with woven interlay. The quality of the foam means that the corner seals return to their original shape without deformation. They are easily fitted to the side wall frame of the dock shelter.

1.7 Parking guide EG

1.7.1 Application

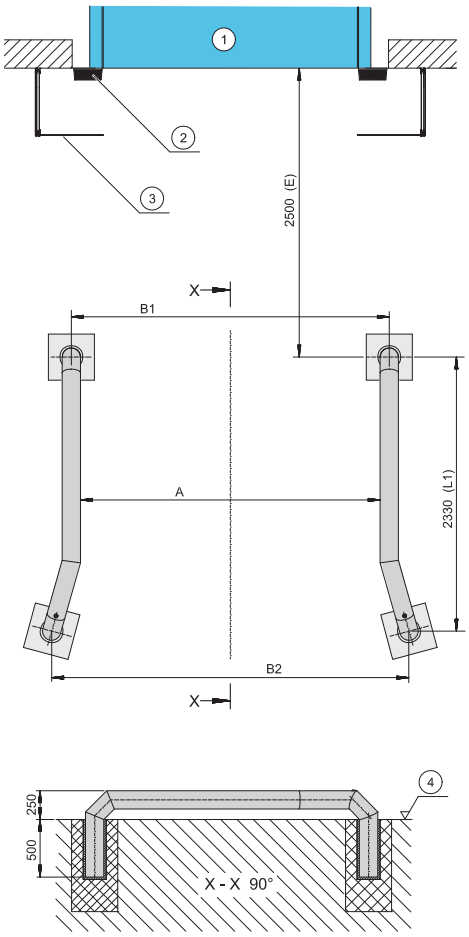
Parking guides are a simple but effective aid to improve the positioning of a vehicle on the loading bay. This reduces the possibility of damage to the vehicle, dock shelter, dock leveller or the building. Parking guides are an economical solution with a very short return on investment. They are especially useful in conjunction with wide dock levellers or cushion seals, where accurate vehicle positioning is essential.

The blank galvanised parking guides are available either to cast into a concrete foundation or to bolt down with base plates.



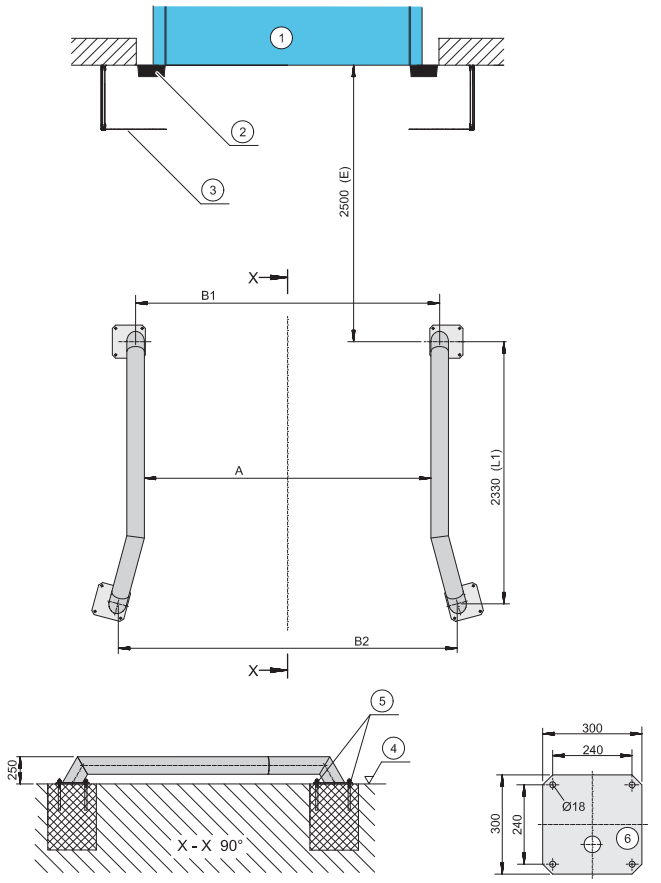
1.7.2 Installation modes

1.7.2.1 Cast in concrete installation



1	Dock leveller
2	Buffer / bolts
3	Dock shelter
4	Yard level
(E)	recommended
L1	Nominal length / axle base
A	Access width
B1	Rear width / centre-to-centre distance
B2	Front width / centre-to-centre distance

1.7.2.2 Bolted installation

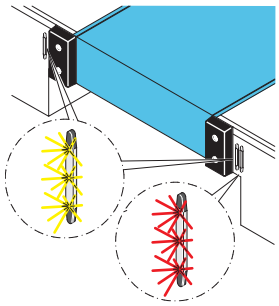


1	Dock leveller
2	Buffer / bolts
3	Dock shelter
4	Yard level
5	Fixings (by Crawford) • Dowel M16
6	Base plates
(E)	recommended
L1	Nominal length / axle base
A	Access width
B1	Rear width / centre-to-centre distance
B2	Front width / centre-to-centre distance

1.7.2.3 Dimensions

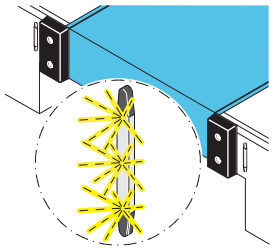
A	B1	B2
2400 mm	2560 mm	2885 mm
2500 mm	2660 mm	2985 mm
2600 mm	2760 mm	3085 mm

1.8 Crawford DE6090DI Dock-IN



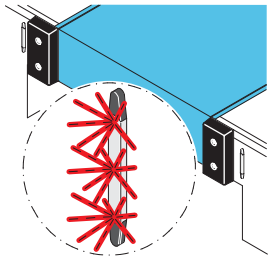
Crawford Dock-IN offers a complete line of guide- and traffic lights that align the truck with the docking bay to make the dock-in procedure easy and safe. Crawford Dock-IN is based on modern LED technology and stands for high reliability and low energy consumption.

1.8.1 Dock-IN White



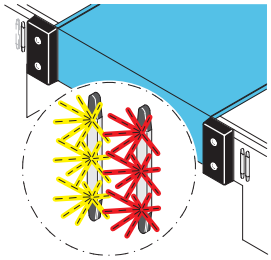
Crawford Dock-IN White consists of two white LED light bars. It is designed to help guide a truck to the dock. Crawford Dock-IN White offers much more visual aid than white stripes on the shelter or asphalt. Mounted on the wall they are always clearly visible, less exposed to wear and tear and not hidden by dirt and snow!

1.8.2 Dock-IN Red



Crawford Dock-IN Red is a traffic light system consisting of one red LED light bar, a sensor for truck detection and a traffic light control box. The sensor detects the truck when it is in the right position, very close to the dock. The red LED turns ON to give the signal to the truck driver to break and let the truck roll against the buffer at the lowest speed, without the risk of damage. The system includes interlocking of the loading bay control box functions which are only released when the truck is in place and the red LED is ON.

1.8.3 Dock-IN White & Red



Crawford Dock-IN White & Red is the optimum combination of both systems for easy and safe docking. The white LEDs provide the visual target and the red LED positions the truck at the right distance to the dock. The white guiding LEDs turn off when the truck is detected and at the same time the red LED turns ON. Crawford Dock-IN White & Red guide the truck driver in the best possible way for an easy and safe docking.

1.8.4 Specifications

- Life time: 5 years when powered-up 24h/day
- Operating temperature: -20°C to + 55°C
- Operating humidity: 0 - 80% rel., not condensing
- Degree of protection: IP 55

1.8.5 Dimensions

The Guide Light Docking is 280mm high and 26mm wide.

1.8.6 Available Options

- Indication Light Inside, built into the 950 control box

A Green LED light on the control box to indicate that the control box functions are released. The operator of the loading bay equipment knows exactly when he can start loading or unloading. The green LED light will help to save energy and to control the complete loading process.

- Second Red LED

A second Red LED bar can be added to have the red LED traffic light on both sides of the docking bay. This is an option for terminals with left and right hand drive international trucks.

- Wheel chock connection

To increase the safety it is possible to connect the Crawford wheel chock to the traffic light function Crawford Dock-IN Red or Crawford Dock-IN White and Red. The control box will be interlocked until the truck is detected and the wheel chock is in place.

Note:

Make sure the LED bars will not be covered by the Dock shelter.

Lowest possible truck is max. 2000 mm below the sensor position.

1.9 Monitoring systems

As an option on all our products, a Crawford Monitoring System can be installed. This system helps to ensure efficiency and security in daily operations. All doors or docking stations are connected to the Monitoring System's server, which gives the opportunity to supervise, monitor and report a wide variety of aspects in a facility.

1.9.1 Saving energy

A monitoring system reduces energy costs and contributes to a better environment. Energy is lost every time a door is open. If a door is open when no truck is at the bay, even more energy is lost.

A Crawford Monitoring System automatically ensures that no door will open unless there is a truck at the bay and even set it to close when there an activity is delayed.

1.9.2 Security enhancement

Closing and locking doors is an obvious daily routine. However, checking this manually can be time consuming in a busy facility.

A Crawford Monitoring System can automatically ensure that all doors are closed and locked when they need to be. It can also activate all doors and locks from its remote location, and give a real-time overview of the building's situation.

1.9.3 Dock management

A good way to increase throughput and thereby efficiency at a logistics facility is to reduce the time of having no truck – or the wrong truck – at a loading bay.

A Crawford Monitoring System makes visible – in real-time – which bays are occupied or free, and for how long. It makes it possible to reserve bays for docking activities and to inform drivers via SMS. Since it incorporates information from cameras and other inputs (RFID, card readers, etc.), the system stays updated in real-time.

1.9.4 Facility management

The Crawford Monitoring System gives a real-time service status for all your door and docking equipment. If an error code occurs, the Crawford service organisation is automatically notified, and will respond quickly. Other maintenance information can easily be integrated, further reducing the overall costs.

2. Service

Preventive Maintenance Program and Modernization Services

As your entrances are part of your business flow, there's every reason to keep them working well. ASSA ABLOY Entrance Systems offers you a maintenance and modernization expertise to rely on. Our Maintenance Programs and Modernization Services are backed by a extensive expertise for all types of industrial door and docking systems, independent of brand. At your disposal is a team of dedicated expert technicians, proven through decades of maintenance, service and satisfied customers.

Preventive Maintenance Programs

Minimizing lost time, lost energy and unexpected hassle is our team's constant objective. Our service organization can support you 24/7 in maintaining all industrial door and docking systems, independent of brand. If you want to be one step ahead of break-downs, explore our portfolio of Pro-Active Care plans. Naturally, we also offer entrance upgrades to suit your specific wishes and business needs.

Pro-Active Care - Maintenance plans to fit your business

Regular maintenance can extend the lifetime of your equipment and help prevent unexpected problems. Our technician arrives on-site equipped with the knowledge and tools to service all automatic entrances, independent of brand.

- **Pro-Active Bronze**

The base on which all Pro-Active Plans are built provides the security of knowing that your equipment is regularly inspected and certified for safety, as well as performing optimally. It includes a number of planned on-site visits depending on your needs. Any unplanned service calls required during the term of the contract (including labor, travel and parts) are billed at special Pro-Active Care prices.

- **Pro-Active Silver**

This plan provides all the benefits of Pro-Active Bronze with the added advantage of labor and travel being included for service calls during regular business hours. The only additional charge would be for any parts that may be needed throughout the term of the contract.

- **Pro-Active Gold**

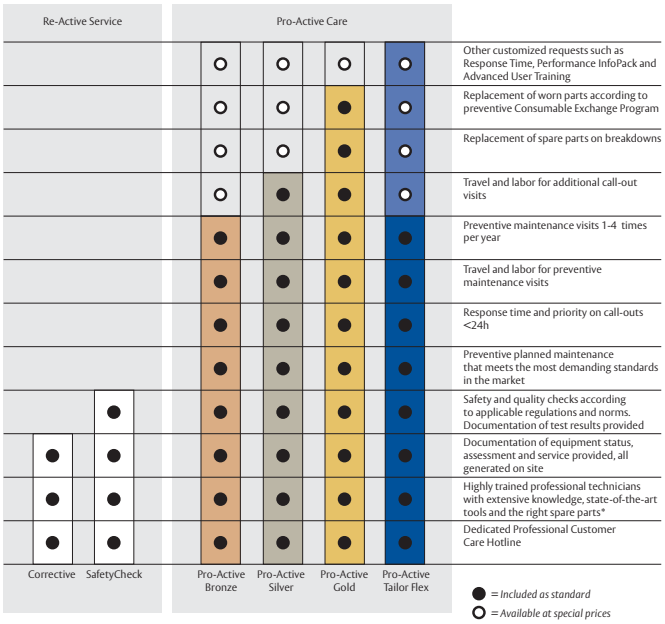
This plan provides the ultimate protection for your automatic entrance investment. It includes all the benefits of Pro-Active Silver, plus replacement of any parts required during an unplanned repair or planned maintenance visit. Pro-Active Gold is an excellent way to budget your automatic door expenses annually.

- **Pro-Active Tailor-Flex**

Our most flexible maintenance and service offering. The Pro-Active Care plan is designed by you, our customer. The plan allows you to balance your maintenance expenses against your real-world budget and presents the option to add or delete a number of maintenance elements to suit your budget goals, while meeting your overall performance and safety needs.

Modernization

Your entrances are a long-term investment, from which you always want the best. Products develop over time, so do regulations and your business. Let us help you increase energy savings and meet today's standards. We provide advice and modernization kits for outdated installations, ensuring your investment meet requirements and performs optimally for many more years to come.



Index

ASSA ABLOY Entrance Systems is a leading supplier of entrance automation solutions for efficient flow of goods and people. With our globally recognized product brands Besam, Crawford, Megadoor and Albany, we offer products and services dedicated to satisfying end-user needs for safe, secure, convenient and sustainable operations.
ASSA ABLOY Entrance Systems is a division within ASSA ABLOY.

assaabloyentrance.com

Q2.0 - 2014

ASSA ABLOY Entrance Systems

assaabloyentrance.com