

Product datasheet

Folding door

Crawford FD2150P

ASSA ABLOY

ASSA ABLOY Entrance Systems

The global leader in
door opening solutions



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Technical facts

Features

Max size: (W x H)*	5000 mm x 5000 mm
Leaf thickness:	50 mm
Material:	CFC-free polyurethane with sheet metal inner and outer skins
Colour outside / inside:	Standard 5 pre-coated colours
Windows:	TG1, TG2, TG5
Passdoor:	Optional: built in door leaf, built in fixed section, leaf as passdoor

* Other sizes are available on request

Performance

Life time expectations:	Door: 200.000 door cycles/20 years (with the recommended yearly service check)
Wind load, EN12424	Class 5 **
Thermal transmittance, EN12428	1,6 W/m ² .k ***
Water penetration, EN12425	Class 3 ****
Air permeability, EN12426	Class 4 ****

** DLW 5000 mm x DLH 5000 mm

*** Door configuration 4000 mm x 4000 mm, 2 + 2

**** DLW 3500 mm x DLH 3100 mm

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1. Description

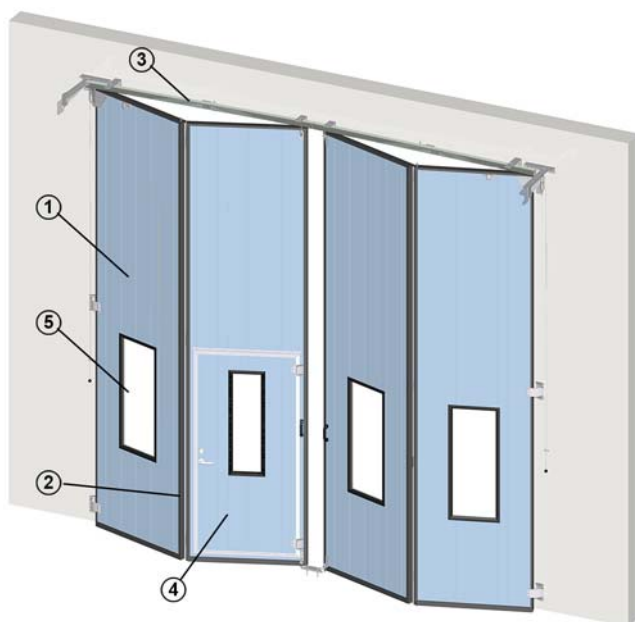
1.1 General

The Crawford FD2150P folding door is designed to be strong, stable and robust folding door. It delivers a unique mix of safety, reliability, ease of opening and optimal space-saving. This smart sideways folding door is so easy to open, even after long periods. Crawford FD2150P folding door is the perfect choice for the unique needs of the farming, construction, industrial and automotive industries.

Crawford FD2150P folding door comes with a tight, well-sealed and high wind load resistance to take whatever the weather throws at it. This smart, economical folding door gives you the peace of mind and protection you need.

Built for premises where space around the door is limited, Crawford FD2150P folding door provides the perfect fit. It's available in a range of sizes, configurations, opening, locking, folding and color options. Manufacturing with durable materials including an aluminum frame, and with few moving parts, this door is an excellent choice for years of reliable and secure use.

The Crawford FD2150P folding door has been designed to meet all operational and safety requirements in the European Directives and the standards issued by the European Standardization Committee, CEN.



The Crawford FD2150P folding door has 5 primary parts:

- 1) Door leaf
- 2) Seals
- 3) Hardware
- 4) Passdoor (option)
- 5) Windows (option)

1.1.1 Standard

Although every Crawford door is custom built, the Crawford FD2150P folding door is supplied with the following specifications as standard:

Door leaf:	Aluminium frames covered with steel sheets and filled with polyurethane insulation.
Operation:	Auto lock in open position
Colours:	5 pre-coated colours
Number of door leaves:	Max. 2 door leaves per side.

1.1.2 Options

ASSA ABLOY provides a wide range of options and accessories to customise the Crawford FD2150P folding door to any customer's needs.

Passdoor:	Built in door leaf Entire leaf as passdoor
Windows:	TG1, TG2, TG5: Double sided insulated hardened glass
Locks:	Assa lock box Euro lock box Abloy lock box
Painting:	Factory painting any colour on request
Operation:	Delivered with or prepared for: Key locks system

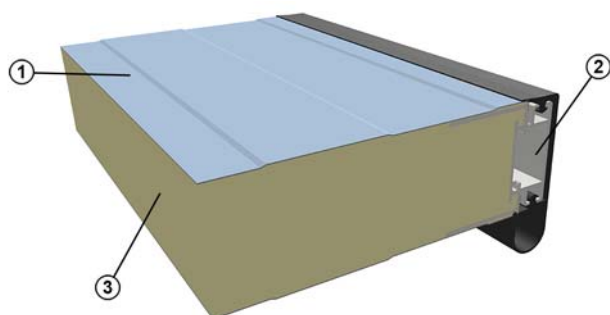
1.2 Door leaves

1.2.1 Construction

The Crawford FD2150P folding door comprises vertical door leaves, connected together with hinges. Rollers are installed on the top of the middle door leaf. The rollers run in the top track to enable opening and closing of the door.

1.2.2 Material

The sections are made of aluminium profiles, clad with sheet metal panels, insulated with polyurethane foam.



- 1) Rilled steel sheet
- 2) Aluminium frame
- 3) Polyurethane insulation

1.2.3 Colours

The Crawford FD2150P folding door is available in any colour on request.

1.2.3.1 Standard colours

As a standard, the Crawford FD2150P folding door is available in 5 pre-coated colours.



1.2.3.2 Optional colours

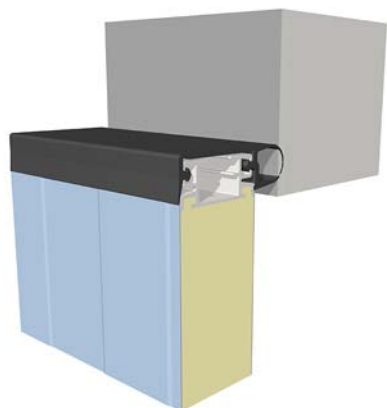
- Factory painting, all RAL colours, including metallic colours
- Factory painting, acc. to colour sample

1.2.4 Seals

The door is equipped with well designed seals on all sides that gives the door its excellent sealing abilities.

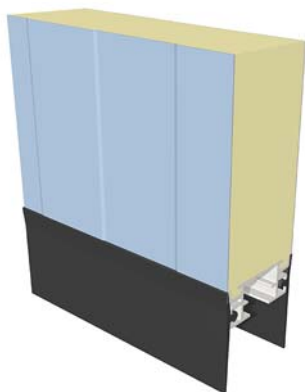
1.2.4.1 Top seal

Installed at the top of all door leaves, the top seal provides continuous pressure on the wall when the door is closed, ensuring maximum sealing.



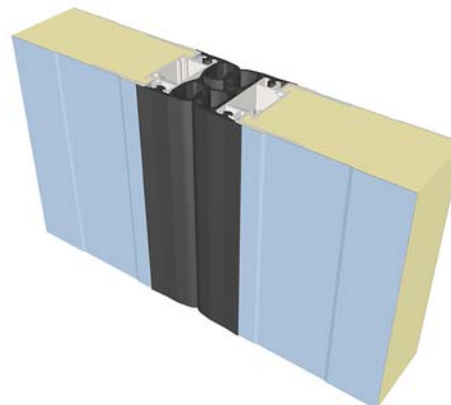
1.2.4.2 Bottom seal

Installed on the bottom edge of each door leaf, the bottom seal provides continuous pressure on the floor, ensuring maximum sealing.



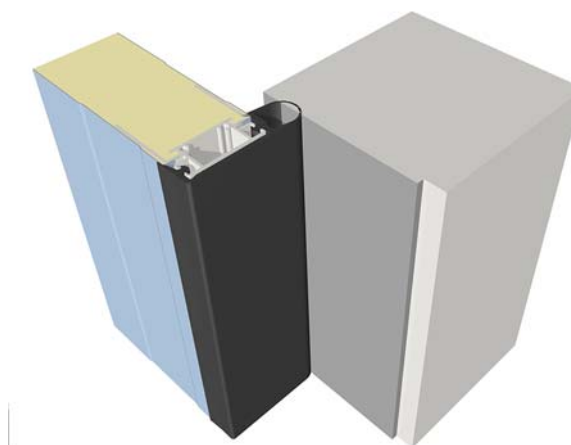
1.2.4.3 Seal between hinged leaves

Installed between each pair of door leaves, the middle seal provides continuous pressure on the adjacent door leaf's seal when the door is closed, ensuring maximum sealing.



1.2.4.4 Side seal

Installed on the sides of the outer door leaves, the side seal provides continuous pressure on the wall when the door is closed, ensuring maximum sealing.



1.2.5 Hardware

Robust and stable construction made of galvanized steel and anodized aluminium. Designed for easy movement of the folding door and long life time.

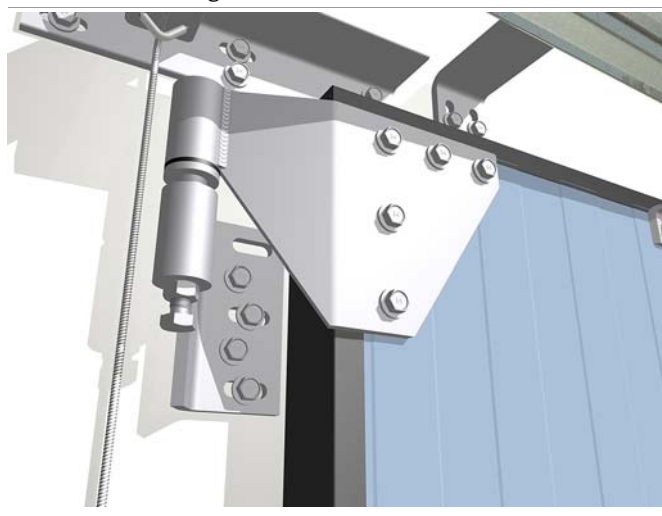
1.2.5.1 Upper track

The upper track guides the door leaves to fold into position. It is made of galvanized steel



1.2.5.2 Top hinge

The top hinges support the weight and the movement of the door leaf. Made of galvanized steel.



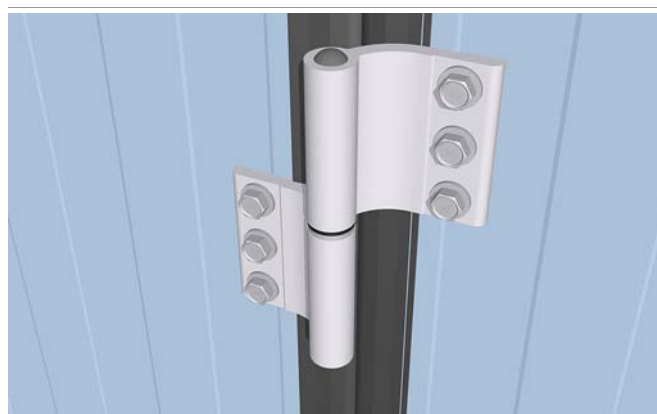
1.2.5.3 Wall hinge

The middle and lower wall hinges are made of galvanized steel and anodized aluminium.



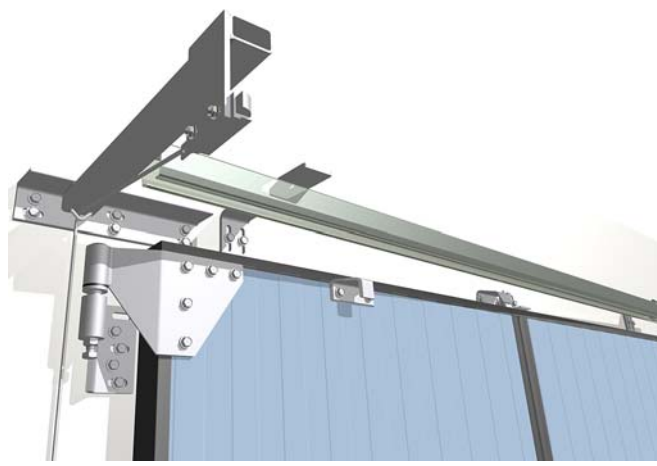
1.2.5.4 Hinge between door leaves

Hinges between door leaves keep the door leaves connected to each other. A reinforcement in the door leaf ensures maximal lifetime. Made of anodized aluminium.



1.2.5.5 Autolock for open position

An autolock prevents unexpected movement when the door is fully opened. Pulling the rope releases the autolock.



1.2.6 Windows

The frame construction allows windows in all door leaves. The light opening depends on the dimensions of the door leaf.

1.2.6.1 TG1



- Double-sided insulated hardened glass, rectangular, in plastic frame
- Light opening: 410 x 505 mm
- Window frame: black polycarbonate
- Window frames are burglar proof

1.2.6.2 TG2



- Double-sided insulated hardened glass, rectangular, in plastic frame
- Light opening: 410 x 1105 mm
- Window frame: black polycarbonate
- Window frames are burglar proof

1.2.6.3 TG5



- Double-sided insulated hardened glass, rectangular, in plastic frame
- Light opening: 245 x 555 mm
- Window frame: black polycarbonate
- Window frames are burglar proof

1.2.6.4 TG3 - only for passdoor



- Double-sided insulated hardened glass, rectangular, in plastic frame
- Light opening: 260 x 405 mm
- Window frame: black polycarbonate
- Window frames are burglar proof

1.2.6.5 TG4 - only for passdoor



- Double-sided insulated hardened glass, rectangular, in plastic frame
- Light opening: 260 x 1005 mm
- Window frame: black polycarbonate
- Window frames are burglar proof

1.2.7 Passdoor

For easy access the Crawford FD2150P folding door can be delivered with a passdoor. It is also possible to have a door leaf as passdoor in cases where the door has a single leaf or an uneven numbers of leaves on one side.

1.2.7.1 Passdoor in doorleaf

The passdoor is designed with a handle that ensures easy opening and closing of the passdoor.



Features:

- Always opening outwards, min. 90 degrees opening
- Hinged left or right
- Seals in passdoor frame reduce air permeability
- All commonly used lock cylinders are available on request: Euro, ABLOY, ASSA
- Optimized width
- Anodized aluminium frame
- Hinges made of galvanized steel and anodized aluminium

1.2.7.2 Door leaf as a passdoor

The passdoor does not have a threshold and is delivered with a cremone lock as standard. The cremone handle ensures easy opening and closing of the passdoor. All commonly used cylinder locks are also available on request.



Features:

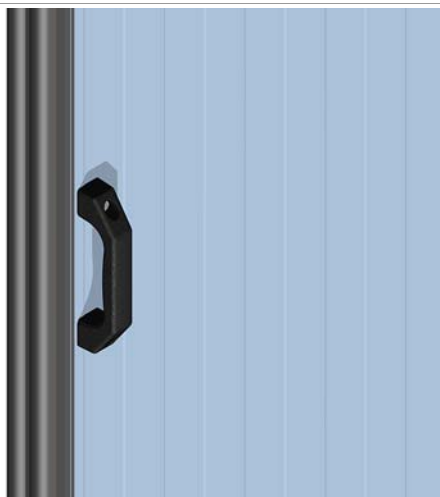
- No threshold
- Opening direction depends on installation side
- Only manually operated doors
- Cremone lock or standard cylinder lock
- All commonly used lock cylinders are available on request: Euro, ABLOY, ASSA
- Max. allowed dimension of door leaf: 4 m²
- Profile made of black anodized aluminium

1.3 Handles and locks

The Crawford FD2150P folding door can be opened and closed by hand, using a solid, easy to grip handle and a cremone lock.

1.3.1 Handle

For manual operation the Crawford FD2150P folding door is supplied with a solid, easy to grip handle. The auto lock secures the door in the open position and must be released to close the door.



1.3.2 Locks

1.3.2.1 Cremone lock

The standard cremone lock has an inside handle and can lock the door without the use of a key. Optionally an outside cremone handle can be installed on the cremone lock.



1.3.2.2 Cylinder lock

For extra security a cylinder can be installed in combination with the cremone lock.

2. Specifications

2.1 Dimensions

2.1.1 Daylight width and daylight height

The standard Crawford FD2150P folding door is delivered in the following size range:

Standard door sizes

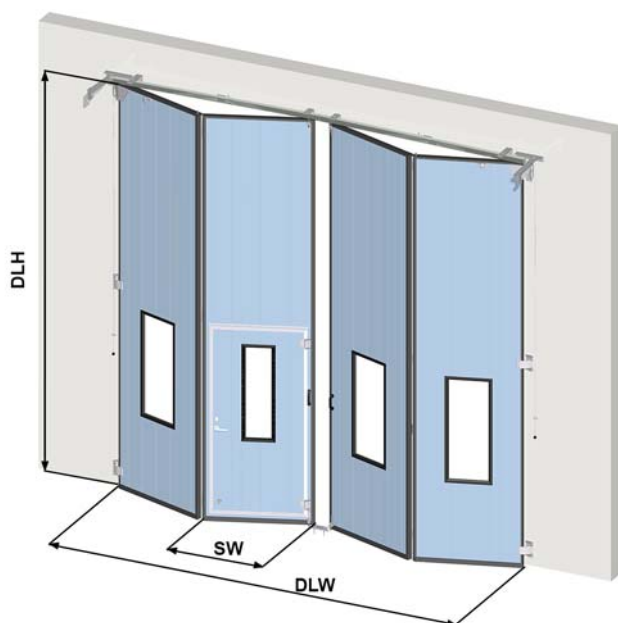
	Daylight width (DLW)	Daylight height (DLH)
Min.:	1600 mm	2000 mm
Max.:	5000 mm	5000 mm

Other sizes available on request.

2.1.2 Section sizes

Leaf width (SW):	586 - 1239 mm*
Thickness:	50 mm

*The total width of the door is equally divided over the leaves at interval steps of 1 mm.



2.2 Configurations

Configuration	Dimensions (DLW)	Dimensions (DLH)	Door assembly
0 + 2	1600 mm - 2473 mm	2000 mm - 5000 mm	
1 + 2	1753 mm - 3712 mm	2000 mm - 5000 mm	
2 + 0	1600 mm - 2473 mm	2000 mm - 5000 mm	
2 + 1	1753 mm - 3712 mm	2000 mm - 5000 mm	
2 + 2	2388 mm - 5000 mm	2000 mm - 5000 mm	

2.3 Passdoor

2.3.1 Passdoor in doorleaf

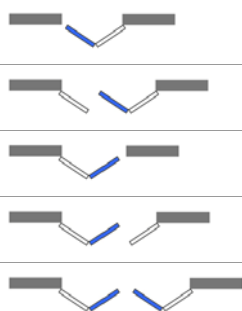
Passdoor size limitations

Type	Passdoor width [mm]	Door leaf width [mm]	Windows
Minimum size	554	739	TG3/TG4/TG5
Maximum size	1054	1239	TG3/TG4/TG5

Specifications

Lock:	Depends on market
Threshold height:	124 mm from floor to door opening

This passdoor is available in below configurations.



2.3.2 Single leaf as a passdoor

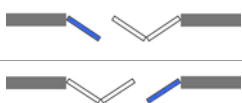
Passdoor size limitations

Max. recommended door leaf surface (width * height) Max. 4 m²

Specifications

Threshold height:	None
Handle/lock	Option: Standard lock with roller latch (only if DLH below 3200 mm) or cremone lock
Lock	Depends on market

This passdoor is available in below configurations.



3. CEN Performance

3.1 Lifetime expectation

200.000 door cycles or 20 years (in a normal industrial environment and with the recommended annual service check)

3.2 Resistance to windload

EN12424		Without passdoor
DLW 5000 mm x DLH 5000 mm		Class 5
DLW 3500 mm x DLH 3000 mm		Class 5
Class	Pressure Pa (N/m ²)	Specification
0	-	No performance determined
1	300	
2	450	
3	700	
4	1000	
5	> 1000	Exceptional : Agreement between manufacturer and supplier

3.3 Resistance to water penetration

EN12425		Without passdoor
Test result		Class 3
Class	Pressure Pa (N/m ²)	Specification
0	-	No performance determined
1	30	Waterspray for 15 minutes
2	50	Waterspray for 20 minutes
3	> 50	Exceptional : Agreement between manufacturer and supplier

3.4 Air permeability

EN12426		Without passdoor
Test result		Class 4
Class	Air permeability dp at a pressure of 50 Pa (m ³ /m ² /h)	
0	-	
1	24	
2	12	
3	6	
4	3	
5	1,5	
6	Exceptional : Agreement between manufacturer and supplier	

3.5 Thermal transmittance

EN12428		Double Acrylic/Glass
Thermal transmittance		1,6 W/m ² K*

* These values are calculated values for a complete, installed, door of 4000 x 4000 mm and have to be confirmed by an official test.

4. Building and space requirements

4.1 Building preparations

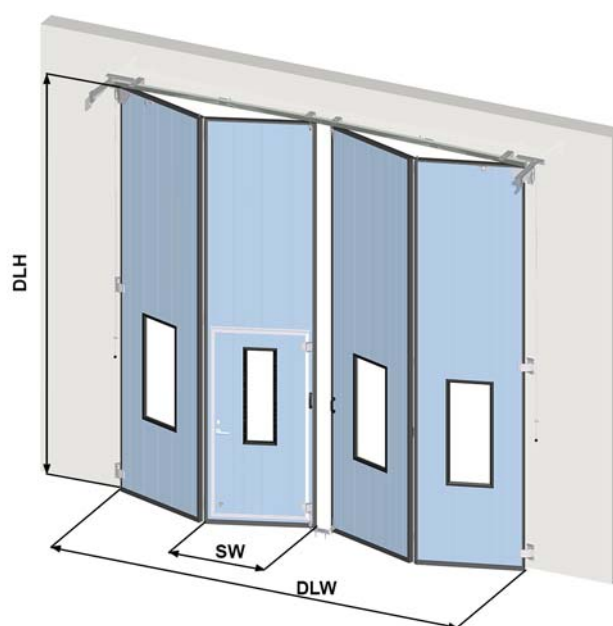
4.1.1 Installation preparations

The Crawford FD2150P folding door is shipped in parts and installed on-site. All necessary installation material is included. For every building type ASSA ABLOY offers specific installation kits to install the door in the building facade. To install the door a solid installation surface is required, with a minimum 100 mm * 4 mm steel plate.

4.2 Space requirements

4.2.1 Dimension terminology

DLW	=	Daylight Width	The width of the clear opening.
DLH	=	Daylight Height	The height of the clear opening.
OH	=	Headroom	The space required above the daylight height.
SL	=	Side space Left	The space required beside the daylight width.
SR	=	Side space Right	The space required beside the daylight width.
D	=	Depth	The space required to move the door leaves.
SW	=	Section / leaf width	The width of a single door leaf.



4.2.2 Space requirements manual doors FD2150P

Configuration

	SL	SR	OH
0+2	105	230	130
2+0	230	105	130
2+1			130
1+2			130
2+2	230	230	130

* Dimensions in mm.

4.2.3 Depth

The minimal required depth is SW (section/leaf width) + 180 mm. All indicated dimensions are based on exact width and height dimensions only. The space necessary for mounting and maintenance has to be provided.

5. 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.

Re-Active Service		Pro-Active Care				
		Pro-Active Bronze	Pro-Active Silver	Pro-Active Gold	Pro-Active Tailor Flex	
		○	○	○	●	Other customized requests such as Response Time, Performance InfoPack and Advanced User Training
		○	○	●	○	Replacement of worn parts according to preventive Consumable Exchange Program
		○	○	●	○	Replacement of spare parts on breakdowns
		○	●	●	○	Travel and labor for additional call-out visits
		●	●	●	●	Preventive maintenance visits 1-4 times per year
		●	●	●	●	Travel and labor for preventive maintenance visits
		●	●	●	●	Response time and priority on call-outs <24h
		●	●	●	●	Preventive planned maintenance that meets the most demanding standards in the market
	●	●	●	●	●	Safety and quality checks according to applicable regulations and norms. Documentation of test results provided
●	●	●	●	●	●	Documentation of equipment status, assessment and service provided, all generated on site
●	●	●	●	●	●	Highly trained professional technicians with extensive knowledge, state-of-the-art tools and the right spare parts*
●	●	●	●	●	●	Dedicated Professional Customer Care Hotline

● = Included as standard
○ = Available at special prices
* Well-stocked service vehicles with genuine and new spare parts

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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.
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