

# **INNOVATION** *in Industrial Doors*

## **PHOENIX**

Horizontal bi-folding, sliding/folding and straight sliding doors – external door systems designed to operate in any business sector.

### THE PHOENIX RANGE

#### Product Range Introduction.

The Phoenix range of horizontally sliding and folding doors are a proven choice for businesses across the globe. The doors' robust design, excellent insulation properties, ease of operation, safety, reliability and low maintenance make them the perfect choice – whatever the industry.

Swift, Osprey and Kingfisher doors provide versatility across a wealth of industry sectors including aviation, emergency services, transport, defence, education, retail and utilities. They are ideal for applications requiring rapid movement of vehicles in and out of a building, fit into extremely wide or narrow openings, and perform in any climate. They are manufactured under rigid production and quality control, designed to minimise any negative impact on the environment, and by reducing heat loss or ingress can reduce building energy costs.

Throughout the range, panels are traditionally manufactured using an internal galvanised steel channel frame, spot-welded with internal strengthening plates at all corners, and packing plates at all hardware positions. They are clad with pre-finished Plastisol coated steel sheets and injected with high density foam insulation to form an extremely rigid flat panel and without any mechanical fixings. Panels are then factory fitted with hinges, handles and push fit seals to provide a fully finished product, which makes site installation simplicity itself.

Options available (subject to size and configuration) are mineral wool insulation, a choice of vision panel sizes or fully glazed leaves, powder coat or Colorcoat Prisma® finish and full height personnel doors or inset wicket doors.

By working closely with architects, contractors and end users, Phoenix doors can be specifically designed and manufactured for new build projects or to upgrade an existing structure where the door is beyond economic repair. Each project undertaken drives continuous product improvement and this is reflected by a loyal and growing customer base.

Put simply, you can be assured that by choosing any of the Phoenix range of doors, you will gain a superior industrial door solution that will offer years of trouble-free and safe service, day in, day out.

#### The Phoenix range comprises three horizontally moving door solutions:

- Swift Side-hung bi-folding door
- Osprey Top-hung sliding/folding door
- Kingfisher Straight-sliding door





OSPREY OSP-M



OSPREY OSP-E

KINGFISHER KNF-THM

SWIFT SWT-E (FG)

PRODUCT	SWIFT	SWIFT	SWIFT-SEW	OSPREY	OSPREY	KINGFISHER	KINGFISHER	KINGFISHER	KINGFISHER
	(MANUAL)	(ELECTRIC)	(ELECTRIC)	(MANUAL)	(ELECTRIC)	(MANUAL)	(ELECTRIC)	(MANUAL)	(ELECTRIC)
SHORT NAME	SWT-M	SWT-E	SWT-SEW	OSP-M	OSP-E	KNF-THM	KNF-THE	KNF-BRM	KNF-BRE
FEATURE									
HANGING ARRANGEMENT	SIDE-HUNG BI-FOLDING			TOP-HUNG FOLDING		TOP-HUNG SLIDING		BOTTOM-ROLLING SLIDING	
CONFIGURATIONS AVAILABLE	1, 2 or 3 leaves to each side, i.e. 2+1, 3+0, 3+2	2+0, 2+2	2+2	multiple leaf configurations.	up to 10 leaves folding to one or each side.	multiple leaf configurations.	1 leaf per track sliding to one/both sides.	multiple leaf configurations.	1 leaf per track sliding to one side.
OPENING SIZES (all dims in mm.)									
MAX WIDTH	5700	4750	5000	UNLIMITED	20000	UNLIMITED	12000	UNLIMITED	30000
MAX HEIGHT	6000	6000	7000	6000	6000	6000	6000	6000	7000
MAX OPENING AREA	24000	12000 (2+0)	32500	UNLIMITED	50000 (1-way)	UNLIMITED	36000 (1-way)	UNLIMITED	90000 (1-way)
		24000 (2+2)			10000 (bi-part)		72000 (bi-part)		18000 (bi-part)
SIDEROOM	200	225	300	Varies. Refer OSP series dwgs.	Varies. Refer OSP series dwgs.	Varies. Refer KNF series dwgs.	Varies. Refer KNF series dwgs.	Varies. Refer KNF series dwgs.	Varies. Refer KNF series dwgs.
HEADROOM	150	150	450	180	230	180	230	150	150
MAX NO. TRACKS	1	1	1	1	1	6	2	6	6
MOUNTED INSIDE OR OUTSIDE (In, Out)	In/Out	In	In/Out	In/Out	In	In/Out	In/Out	In/Out	In
OPERATION									
ELECTRIC OPERATION	N/A	✓	✓	N/A	✓	N/A	✓	N/A	✓
MANUAL OPERATION (M/O = MANUAL OVERRIDE INCLUDED)	✓	M/O	M/O	✓	M/O	<b>√</b>	M/O	✓	M/O
OPENING SPEED	N/A	5 secs (max 1.0m/s)	8 secs (max 0.6m/s)	N/A	max 0.4m/s	N/A	max 0.4m/s	N/A	max 0.25m/s
PANEL CONSTRUCTION									
SOLID PANEL POLYURETHANE (THICKNESS MM)	√ (52)	√ (52)	√ (62)	√ (52, 62)	√ (52, 62)	√ (52)	√ (52)	√ (52)	√ (52, 62)
SOLID PANEL MINERAL WOOL (RW) (MAX 4500H, 52 THICK)	✓	✓	✓	✓	✓	✓	✓	✓	✓
PART GLAZING (THICKNESS MM)	√ (52)	√ (52)	√ (62)	√ (52, 62)	√ (52, 62)	√ (52)	√ (52)	√ (52)	√ (52, 62)
FULL GLAZING (FG) (MAX. 5000H, 50 THICK)	<b>√</b>	<b>√</b>	N/A	✓ ·	✓ ·	✓ ·	✓	√ ·	<b>√</b>
OTHER FEATURES									
INTEGRATED PERSONNEL DOORS	√	√ ·	√	√	√	1	1	√	✓
FULL HEIGHT ACCESS LEAF	_	×	×	√	×	X	X	X	X

o Refer to individual SWT, OSP and KNF drawings and product datasheets for detailed configurations, opening arrangements, sizes and specifications.

### **SWIFT**

### Specifications.

Swift by name, swift by nature. The Swift door is a side-hung, fast opening, insulated flat panel bi-folding door, which is arguably the simplest and most reliable industrial door system available on the market.

In its basic four (2+2) leaf manual form, a flick of the wrist will disengage top and bottom shoot bolts and swing open each door half instantly providing the user full opening clearance. Leaves are hung from four purpose engineered jamb hinges and have a steel top guide track to control the swing of the door. A chamfered solid aluminium threshold provides a natural base for the door to seal against, prevents water ingress and greatly reduces friction as the door opens and closes.

The Swift door is available in seven different leaf configurations, with any combination of one, two or three leaves hinged to one or both jambs. An odd leaf, supplied as a single or in three leaf sections (in 2+1, 3+0, 3+1, 3+2 or 3+3 arrangements). This can be fitted with robust lever furniture to provide full height access, and without a step at the floor provides unhindered passage for pallet trucks, wheelie bins or wheelchair users.

Electric operation is available on Swift two leaf doors (2+0, or 2+2 arrangements) using world-renowned FAAC hydraulic drive units, which safely propel the door from closed to fully open in only 5 seconds, and in tests have had the door closed again before similar sized overhead type doors have even opened.

The Swift's bigger brother is the Swift-SEW door, which has been designed primarily for the Rail Industry and is electrically operated as standard, catering for taller openings up to 7 metres in height.

In the event of a power failure, manual operation of electric doors is effortless – the drive can be disengaged at low-level to allow access in a matter of seconds. No other door provides this speed of operation in both manual and automatic versions, and full security at all times.

#### **Key Features**

- Leaves fold clear of the opening and require only 200 mm side room.
- Minimal headroom of only 150 mm for low clearance openings.
- Horizontal folding action provide full height access as soon as the door moves.
- No bottom track leaving a clear threshold.
- Full height pass doors or integral wicket doors can be incorporated within the main door.
- Invisible protection zone around the opening prevents doors impacting on people or vehicles during both closing and opening.













### **OSPREY**

Specifications.

An extremely versatile door from the Phoenix range, the Osprey top-hung sliding/folding door combines robust design with modern appearance to provide the simplest door system for wider span openings.

Factory tested for over 250,000 continuous operations, and constantly improved since, this multi-leaf system will provide years of reliable service.

In the closed position, Osprey doors form a flat wall of panels, each approximately 1 metre wide. When open, door leaves fold into tight bunches, providing full height clearance for vehicular access as they open.

Whilst components are the same for all Osprey doors, this system has a multitude of 'standard' arrangements. It can be manually or electrically operated, with electric versions having up to ten leaves sliding to each side of the opening before folding behind the reveal to provide a clear opening. Manual doors can be 'hinged to the jamb' ensuring door leaves open and close to the same position every time, or when greater flexibility is required they can be 'fully floating', meaning bunched leaves can be pushed to either side. For larger spans, leaves can be arranged in several sections, which can be individually opened to provide smaller apertures, or the entire door folded aside to create one vast opening.

Tracks and running gear are purpose-designed to accommodate the vertical and side loadings associated with external doors operating in extreme conditions, and all components are from non-corrosive materials to ensure the longevity of the product.

Electric operation is provided by inverter drive units and multi-programmable control boards with soft start and stop, integrated push button controls, and a host of safety features as standard.

#### **Key Features**

- Unlimited width for manually operated doors.
- Maximum width 20 metres and up to 100m<sup>2</sup> area for electrically operated doors.
- Maximum height of 6 metres as standard,7 metres by design.
- Easy-to-clean galvanised bottom guide track with built-in threshold.
- Sealed for life self-lubricating hinges and guides.
- Weather-tight seals tested to Class 2 Air Permeability and Class 3 Water Leakage.
- Tested to Class 4 wind loading in accordance with BS EN 13241.
- Laboratory tested to reduce noise by 25dB.

### **KINGFISHER**

### Specifications.

The Kingfisher is a traditional, straight-sliding door system, which can be configured to suit any width of opening and up to 7 metres in height. Whether for a private aircraft hangar or a university workshop, the Kingfisher door will fit.

Available as either a bottom-rolling or top-hung system, sliding on one or multiple tracks, manual or electrically operated, the Kingfisher is a highly versatile performer.

Sliding leaves are factory pre-assembled with sliding door gear and all seals to rigid top and bottom tubular rails, which support in-house designed sliding door gear. Pre-assembly and pre-finishing of all door components, including EPDM rubber seals, ensures fast and accurate site installation, a high-quality finish and with class-leading weather sealing to all joints. Individual panels are manufactured using classic Phoenix composite panels with optional vision panels and wicket doors.

Door leaves are easy to move by hand in either top-hung or bottom-rolling form, or if greater control is required, electric operation is available as standard to all Kingfisher doors.

Top-hung electrically operated versions are limited to twin track bi-parting arrangements of 72  $\,\mathrm{m}^2$ , whilst bottom-rolling doors can be configured to  $180\,\mathrm{m}^2$  in multiple leaves on up to six parallel tracks.

Overall, the Kingfisher is an economical and successful design that has proved its superior qualities in widely varying applications around the globe.

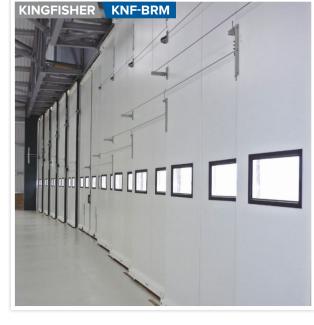
#### **Key Features**

- Unlimited opening width for manually operated "push-along" doors.
- Top-hung or bottom-rolling (to suit non-load bearing lintels).
- Maximum 180 m² for bottom-rolling power-operated doors.
- Innovative flat panel, single piece construction.
- Roller shutter tailgates can be incorporated for high tail aircraft.
- Low rolling resistance for ease of use.
- Inset wicket doors with or without threshold step.
- Solid, partially glazed or full glazing available.
- Coordinated black-line hardware.
- Factory assembled for trouble-free installation.













### **AVIATION**

#### Efficient. Durable. Proven.

The Phoenix range is an established choice for industrial doors throughout general aviation. Their reliability, simple operation, versatility and immaculate safety record has resulted in a loyal customer base that continues to grow.

The Osprey top-hung sliding/folding door is particularly suited for aviation professionals and enthusiasts alike. This multi-leaf door is easy to operate by hand for spans up to 40 metres wide, and electrically operated Osprey doors can open and close 20 metre openings safely in just 40 seconds.

If a top-hung solution is not an option, the Kingfisher bottom-rolling straight sliding door is an ideal, modern replacement for traditional sliding hangar doors. Rigid in construction and lightweight in operation, individual door leaves can be manufactured to 4.5 metres wide and arranged on up to 6 parallel tracks to create unlimited opening widths. An optional sheaving system greatly reduces the opening and closing effort by simultaneously moving all 'slave' leaves in unison when only the leading 'master' leaf is operated.

For ground support buildings, airport fire stations and workshops. fast-acting Swift or smaller Osprey doors can be used to create a uniform appearance with adjacent hangars.

#### Osprey - Key Facts

- Flush bottom track with integral threshold.
- Multi-leaf construction allows the door to be partially opened when the full aperture is not required.
- Manual doors are easy to open and close by hand.
- Door leaves stack tightly behind the jamb to provide full width and height opening.
- Electric operation is available for doors up to 100 m².
- Drainage as standard, and option for under track heating to prevent water and ice in the track.

#### Kingfisher - Key Facts

- Top-hung or bottom rolling to suit load-bearing and non-load bearing structures.
- Electric operation for openings up to 30 metres wide by 6 metres high.
- Easy to move by hand regardless of leaf size.
- Flush bottom tracks to allow smooth movement of aircraft in and out the building.
- Wicket doors provide personnel access without moving the main door.
- Central 'tailgate' doors fitted above the Kingfisher door can increase the clear height to 9 metres.













### **RAIL**

#### Keeping Your Facility on Track.

Engineered and manufactured with the highest quality components and complying with stringent European safety standards, the Phoenix range of doors is rapidly becoming the mainstay of rail facilities around the world, with projects completed throughout the UK and as far afield as Bergen, Doha, Dubai, Hong Kong, Kuala Lumpur, Sydney and Auckland.

The Swift-SEW bi-folding door has been purpose designed to accommodate the taller openings, overhead electrification wires and rail tracks through the doorway, whilst not forgetting the daily operational demands and unrivalled safety requirements of modern rail maintenance depots.

Based on the original Swift door, the Swift-SEW incorporates sturdier hardware and a powerful central drive unit working in tandem with a programmable smart relay control board to create an extremely smooth, safe, and future-proof door system that will last as long as the building.

The door can be integrated with building management systems (BMS), depot protection systems (DPS), heating, ventilation or air conditioning (HVAC), and Train Wash plant to create ultimate control. A visual display on the door control panel provides real-time status or error reporting to the user and back to Jewers' HQ for instant fault diagnosis.

Our door solutions are not just about being robust and durable; the Phoenix range also combines aesthetic appeal with modern technological advancements to offer rail facilities a comprehensive package that not only gives a reliable solution, but can also complement new and existing architecture.

#### Swift-SEW - Key Facts

- Side-hung and without a floor track to ensure door leaves glide across rail tracks.
- Electrically operated via a smooth, powerful, fast and efficient helical-worm gear motor producing high torque.
- Effortless and instant low-level manual override handle
- Door closes around overhead line equipment (OLE).
- Designed for openings up to 5 metres wide and up to 7 metres high (max 32.5 m²).
- Multi programmable smart relay control board provides complete flexibility of operation.
- Control board integrates with BMS (building management system) and DPS (depot protection system) to create ultimate safety.
- Automatic solenoid floor bolts provide additional security and protect against high winds.

#### **EMERGENCY SERVICES**

When Every Second Counts.

In any emergency, time is a precious commodity. When response times are critical, you can be assured that the Phoenix range of doors will open fast and safely, every time.

Over the past 35 years, the Swift bi-folding door has proved to be an extremely reliable and cost effective door solution in Fire and Ambulance stations alike. Swift doors open quickly, reaching the fully open position in only 5 seconds. The sideways opening action and the option of partial or full glazing provides the driver of the emergency vehicle full visibility of the door position and the street outside to exit the bay safely at all times. Damage to the top of the vehicle or underside of the door is totally eliminated – costly errors of judgement regularly associated with vertically moving doors.

Swift doors are installed with safety and security as standard. An invisible electro-sensitive protection zone around the entire door prevents door leaves opening or closing onto people or vehicles. Furthermore doors can be programmed to operate to the client's exacting specifications. A common requirement is automatic closing immediately after the vehicle exits the bay, maintaining building security at all times.

Manually (or electrically) operated Swift doors are also commonly installed to the rear of fire stations. Wicket doors within the main door provide personnel quick entry back into the bay on return from a shout. Rear doors can effortlessly be swung aside to allow the appliance to re-enter the bay and are secured closed by full height espagnolette bolts.

For larger buildings such as Police Air Support or Air Ambulance hangars, electrically operated Osprey doors offer the ultimate choice. Smaller Osprey doors are perfectly matched for Police vehicle garages and wider bay Fire and Ambulance stations where low headroom and limited space at the side are often a constraint.

#### Swift - Key Facts

- Full opening in only 5 seconds regardless of size.
- Automatic closing on exit for immediate security.
- Effortless and instant low-level manual operation.
- Red/green LED traffic lights offer additional peace of mind.
- Drive units and centre floor shoe automatically locks the door closed.
- Partial or full glazing provides natural lighting and visibility during vehicle exit.
- Invisible protection zone around door prevents doors impacting on people or vehicles.













### **COMMERCIAL & PRIVATE**

Designed for Today's World.

Industrial, commercial and private facilities across the world rely on service. Without fast, safe and reliable access, manufacturing processes, distribution lines and service providers can grind to a halt.

The Phoenix range of sliding and sliding/folding doors can cater for all loading/unloading applications throughout business. Typical projects include supermarket loading halls, city centre office blocks, power station turbine halls, heavy goods vehicle workshops, exhibition centres, underground car parks and university engineering centres.

The beauty of the Phoenix range is its versatility and capability to be utilised in just about any vehicle opening and across a range of sizes ranging from 2.5 metres wide by 2.5 metres high, and stretching beyond 40 metres wide and up to 7 metres in height.

Whether the requirement is for a door to quickly allow a delivery van driver entry to a stores, or to open up the full external wall to an exhibition hall, there is a solution within the Phoenix range.

For instance, a Swift 2+1 leaf system can effortlessly be swung aside to allow full width and height access to a van, but also allow a small parcel to be delivered through the same door by opening only the full height access leaf - two doors in one. Whereas a multi-leaf Osprey sliding/folding or multi-track Kingfisher straight-sliding configuration can be incorporated into any wall to offer full or partial opening space, depending on the user's daily activity.

Whatever the application, the Phoenix range can do it all with ease.

#### **General Phoenix Key Facts**

- Constructed from flat, single-piece panels with an internal steel frame to combine inner strength with outer aesthetic appeal.
- Designed and tested in accordance with BS EN 13241-1:2003 – the product standard for industrial, commercial and garage doors and gates.
- Electrically operated or manually operated configurations available.
- Full height finger trap protection to all joints between leaves and at the jambs.
- Solid panels, partially glazed and fully glazed versions are available as standard.
- Reduced heat loss/ingress reduces energy bills.
- All Phoenix doors have a life expectancy in excess of 20 years with many examples of over 30 years still in existence.
- After life, over 80% of the door can recycled.
- Good acoustic performance minimises noise pollution.
- Lean manufacturing processes ensure a low carbon footprint.



