

	Manually operated door	Electrically operated door
<b>Type of Door</b>	<p>Side hung bi-folding door available with any combination of 1, 2 or 3 leaves folding to the left, right or both sides, i.e., 2+2, 3+1, 3+3 etc. Leaves mount on the inside of the opening and fold inwards at 90°.</p> <p>Refer to pad drawings listed below, and table 1 for details and dimensions of individual configurations:</p> <ul style="list-style-type: none"> <li>SWT20M-5001 (2+0 leaves)</li> <li>SWT21M-5002 (2+1 leaves)</li> <li>SWT22M-5003 (2+2 leaves)</li> <li>SWT30M-5004 (3+0 leaves)</li> <li>SWT31M-5005 (3+1 leaves)</li> <li>SWT32M-5006 (3+2 leaves)</li> <li>SWT33M-5007 (3+3 leaves)</li> </ul>	<p>Side hung fast acting bi-folding door available with 2 leaves folding to the left, right or both sides, 2+0, 0+2 or 2+2. Leaves mount on the inside of the opening and fold inwards at 90°.</p> <p>Refer to pad drawings listed below, and table 1 for details and dimensions of individual configurations:</p> <ul style="list-style-type: none"> <li>SWT20P-5008 (2+0 leaves)</li> <li>SWT22P-5009 (2+2 leaves)</li> </ul>

leaf configuration	pad dwg.	manual	electric	max. width (mm)	max. height (mm)	subject to max. door area (m <sup>2</sup> )
2+0 0+2	SWT20M-5001 and SWT20P-5008	√	√	2350	5000	11
2+2	SWT22M-5003 and SWT22P-5009	√	√	4750	5000 <sup>(1)</sup>	22
				<b>max. width (mm) for odd leaf configurations</b>		
				<b>upto 3000mm high</b>	<b>up to 4000mm high</b>	<b>up to 4800mm high</b>
3+0 0+3	SWT30M-5004	√	X	2850	2700	2550
2+1 1+2	SWT21M-5002	√	X	3450	3000	2550
3+1 1+3	SWT31M-5005	√	X	3800	3600	3400
3+2 2+3	SWT32M-5006	√	X	4800	4500	4250
3+3	SWT33M-5007	√	X	5700 <sup>(1)</sup>	5400	5100
<b>Swift-FG door size configuration chart</b> (table 1)						

Note (1) – Sizes. Maximum width of 5700mm, and maximum height of 5000mm are subject to the maximum size rules set out in table 1 above. Taller doors up to 6000mm high subject to wind loading.

	Swift standard details	
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<b>Technical Details</b>	Max width 5700mm <sup>(1)</sup> Max height 5000mm <sup>(1)</sup> Panel thickness 52mm Panel U-value TBA. Sideroom required 200mm Headroom required 150mm Weight 25kg/m <sup>2</sup>	Max width 4750mm <sup>(1)</sup> Max height 5000mm <sup>(1)</sup> Panel thickness 52mm Panel U-value TBA. Sideroom required 225mm Headroom required 150mm Weight 25kg/m <sup>2</sup> Power supply 230V, 50Hz, single phase Opening speed 7 seconds
<b>Performance</b>	Performance in accordance with BS EN 13241-1:2003 (based on original Swift tested Aug'05) <ul style="list-style-type: none"> <li>• Forces for Manual Operation – Pass</li> <li>• Operating Forces – Pass</li> <li>• Watertightness – Class 2 (50pa)</li> <li>• Air Permeability – Class 2</li> <li>• Durability of Performance – Pass (110,000 continuous cycles in 60 days)</li> <li>• Life expectancy – more than 25 years</li> <li>• Wind pressure - 1.1kN/m<sup>2</sup> (5m high door), 1.7kN/m<sup>2</sup> (4m high door), 3.1kN/m<sup>2</sup> (3m high door).</li> </ul>	
<b>Panel Construction</b>	Panels are constructed from 70 x 50 x 2mm thick cold rolled galvanised dovetail box section stiles and rails with pressed-in 20mm rebate. Intermediate transoms to match. 5mm thick internal local reinforcement for hardware. Sections are seam welded and finished smooth prior to powder coating.	
<b>Seals</b>	Flexible rubber seals are fitted to all edges of the door, and between door leaves. All seals are purpose-designed EPDM extrusions, which press into, and blend seamlessly with the door panels. Each seal provides full finger trap safeguarding, and excellent protection against weather, dust and sand.	
<b>Top Track and Pendants</b>	The top track is a 70 x 70 x 3 galvanised steel top-hung track mounted back to the surround frame with 6mm pressed steel brackets. Top rollers are 4-wheel pendant trollies with steel bearing wheels running on steel shafts mounted within black aluminium extrusions.	
<b>Jamb Hinges</b>	The weight of each door half is supported by two pairs of jamb hinges. Each pair of hinges is manufactured to a low tolerance from laser cut, fabricated, and machined bright steel. An M24 vertical adjustment screw, 16mm hinge pin, and an Iigus bush complete the assembly, and provide simple, accurate setting during installation, and a low-maintenance, heavy-duty, low-friction component.	
<b>Intermediate Hinges</b>	Apex hinge pairs are machined from solid aluminium extrusions, fitted with sealed for life Iigus bushes and 16mmØ stainless steel hinge pins. A concealed peg ensures that the hinge pins cannot be removed from the outside. Hinges are finished in black polyester powder coat to RAL 9005(M).	
<b>Finish</b>	<u>Option 2</u> Door frames and glazing beads are polyester powder coated in a choice of 40 stock RAL colours. All hinges and drop bolt sleeves are black polyester powder coated in RAL 9005(M).	
Note (2) – Wind Pressure. Wind pressure capacities are based on panel strengths derived from physical tests carried out in the factory. Calculations given are for standard panel construction with 0.65mm skins, without cutouts for windows, and with each panel supported at all four corners. Greater wind pressures can be withstood using thicker door skins, and with additional panel reinforcement. For further advice on wind pressures please consult the manufacturer.		

		<b>Swift-FG standard details and available options</b>	
		<b>Manually operated door</b>	<b>Electrically operated door</b>
<b>Vision Panels</b>	<p><u>Option 1</u> Window units SAN double-glazed units (3~22~3) with RS UV (scratch and UV resistant) sheet outside, PMMA UV sheet inside. Glazing units are maximum 1200mm high.<sup>(3)</sup>. Units are fixed with steel glazing beads and internal and external EPDM glazing gaskets.</p> <p><u>Option 2</u> Window units are double glazed (4~20~4), argon filled, low E toughened glass. Glazing units are maximum 1200mm high. Units are fixed with steel glazing beads and internal and external EPDM glazing gaskets.</p>		
<b>Wicket Door</b>	<p><u>Standard</u> - None fitted.</p> <p><u>Option 1</u> Lever furniture. Wicket door opens outwards. Hardware comprises a mortise sashlock, 70mm profile Rondo stainless steel lever handles, external Europrofile cylinder with internal thumbturn, 1½ pairs of stainless steel butt hinges. 110mm high threshold.</p> <p><u>Option 2</u> Emergency escape furniture. Wicket door opens outwards. Hardware comprises a mortise sashlock, internal Dorma panic touch bar, external override cylinder and finger latch, 1½ pairs stainless steel butt-hinges. 110mm high threshold.</p>		
<b>Locking / Handles</b>	<p><u>Standard</u> A drop bolt and a black thermoplastic easy-grip pull handle are fitted internally between each pair of leaves.</p> <p>(to leading leaf of 2+0, 2+2 leaf doors only). A bottom guide pin engages in a cast aluminium floor shoe fitted to the threshold, holding the leading edge(s) firm. A black thermoplastic easy-grip pull handle is fitted internally.</p> <p><u>Option 1</u> A top and bottom espagnolette shoot bolt operated via an internal, non-lockable lever handle is fitted in lieu of a drop bolt and pull handle.</p>	<p><u>Standard</u> A black thermoplastic easy-grip pull handle is fitted internally between each pair of leaves. An electro hydraulic lock within the drive motor automatically holds the door in the closed position. A small lever fitted at high level to the motor body disengages the drive, and allows the door to be opened manually.</p> <p>A bottom guide pin engages with a cast aluminium floor shoe fitted to the threshold, and holds the leading edge firm. A black thermoplastic easy-grip pull handle is fitted internally.</p> <p><u>Option 1</u> A lever operated floor bolt is fitted internally between pairs of leaves and is electrically interlocked.</p>	
<b>Threshold Plate</b>	<p><u>Standard</u> A 140 x 10mm thick extruded aluminium plate with 30° chamfered edges and anti-slip grooves fixes directly to the floor to form a water bar, presents a level surface for the door to seal against, minimises bottom seal wear as the door folds, and provides a solid location point for floor bolts.</p> <p><u>Option 1</u> No threshold supplied.<sup>(4)</sup></p>		
<p>Note (3) – Due to the hygroscopic nature of the SAN sheets, used in ‘Option 1’ Vision Panels, moisture condensation and possible water accumulation may develop within double glazed units during certain atmospheric conditions. These effects should reverse during a change of weather conditions; however, water leakage through the window unit will not occur.</p> <p>Note (4) – Threshold Plate. It is recommended that a threshold plate is installed. By not installing a threshold plate, the effectiveness of the bottom seals may be reduced, and wear of bottom seals may be expedited.</p>			

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<b>Odd Leaf Hardware</b>	<p><u>Standard</u> (active leaf to 3+0, 2+1, 3+1, 3+2, 3+3 leaf configurations only). The active leaf is designed as a full height pass door. Hardware comprises a mortise sashlock, pair of 70mm profile Rondo stainless steel lever handles, external Europrofile cylinder and internal thumbturn.</p> <p>(passive leaf to 3+1, 3+3 leaf doors only). A top and bottom espagnolette shoot bolt operated via an internal, non-lockable lever handle is fitted.</p> <p><u>Option 1.</u> (active leaf to 3+0, 2+1, 3+1, 3+2, 3+3 leaf configurations only). A drop bolt and black thermoplastic easy-grip pull handle are fitted internally.</p> <p><u>Option 2.</u> (active leaf to 3+0, 2+1, 3+1, 3+2 and 3+3 leaf configurations only). A top and bottom espagnolette shoot bolt operated via an internal, non-lockable lever handle is fitted.</p>	Not applicable
<b>Surround Frame</b>	<p><u>Standard</u> Supplied by others.<sup>(5)</sup></p> <p><u>Option 1.</u> Rear mounted frame - 150 x 75 x 10 RSA (angle) goalpost frame for fixing to the back of an opening. Painted in 100µDFT Leighs Epigrip C400 zinc phosphate primer and 75µDFT Leighs Resistex C137 acrylic urethane semi-gloss to match the door leaves. Supplied with suitable anchor fixings.</p> <p><u>Option 2.</u> Between wall frame - 200 x 100 x 5 RHS (box) goalpost frame for fixing between walls. Painted in 100µDFT Leighs Epigrip C400 zinc phosphate primer and 75µDFT Leighs Resistex C137 acrylic urethane semi-gloss to match the door leaves. Supplied with suitable anchor bolt fixings.</p>	
<p>Note (5) – Surround Frame. A flush steel goalpost surround frame should be provided in order to install a Swift door. The minimum thickness of material to be 5mm, and the width of the internal surface to be minimum 150mm. (See SWT series pad drawings for further information)</p>		

## Swift-FG standard details and available options (electrically operated doors only)

<b>Drive System</b>	<p><u>Standard</u> A FAAC 560 electro-hydraulic motor is mounted internally at the top of each leading edge leaf. A FAAC 455D control panel with 6 function logics, and advanced programming for finer tuning, controls both door halves. A push button unit with Run and Captive Stop buttons is supplied. A manual release arm is fitted to each motor at high-level to enable manual operation of the door.</p> <p><u>Option 1</u> A FAAC 560 electro-hydraulic motor is mounted internally at the top of each leading edge leaf. A FAAC 455D control panel with 6 function logics, and advanced programming for finer tuning, controls both door halves. A push button unit with Run and Captive Stop buttons is supplied. A low-level manual release lever is fitted on the inside face of the door to enable instant manual operation of the door.</p>
<b>Drive System</b>	<p><u>Standard</u> An SEW S Series helical-worm gear motor with lockable manual brake release operates both door halves simultaneously. Motor power is 0.55kW or 0.75kW generating an output torque of up to 2400Nm. The drive unit is mounted above the top track at the centre of the opening. Minimum Ø40mm drive arms connected between the drive 'propeller' and the jamb hinges control the movement of the door.</p> <p>Manual operation is via a low-level aluminium lever handle operating a cable to release the clutch and allow instant manual movement of the door. Re-engaging the lever handle re-engages the drive. The manual release is interlocked to prevent electric operation of the door whilst disengaged.</p>
<b>Safety Features</b>	<p><u>Safety Edges</u> A full height opto-electronic safety edge is mounted within each leading edge seal of the door. An impact on the edge during closing will automatically stop and re-open the door. Safety edges are continuously monitored so the door cannot close automatically in the event of damage or failure of the edge.</p> <p><u>Photocells</u> A FAAC XP15W send / receive photocell is fitted across the opening. The receiver unit is fitted with a long-life battery to avoid hard wiring. Photocells can be fitted for closing safety, opening safety, or a combination of opening and closing. If a closing safety beam is broken during the closing cycle, the door will automatically stop and re-open. If an opening safety beam is broken during the opening cycle, the door will automatically stop.</p> <p><u>Traffic Lights</u> A red and green 24V DC LED traffic light unit is fitted. The unit is sized 370mm x 190mm with 24 LEDs to each light, and is intended to be mounted directly on the inside face of the door or onto a traffic light post. Sequence of operation is Red light on when door closed or part closed, Green light on when door fully open. A pair of 24Vdc limit switches is supplied to monitor the fully open position.</p> <p><u>Photocell / Traffic Light Posts</u> A pair of 100x100 RHS right angle steel posts are fitted on the inside of the bunched door leaves to mount an internal photocell and / or traffic lights. Posts are painted yellow for maximum visibility.</p>
<b>Additional Controls</b>	<p><u>Push Button</u> – Additional Run/Captive stop push button unit.</p> <p><u>Keyswitch</u> – Sprung return keyswitch in separate enclosure for operation of the door by keyholders only. For internal or external use..</p> <p><u>Digi-key</u> – Bewator K42 stainless steel code lock for operation of the door by authorised persons only. For internal or external use.</p> <p><u>Radio Control</u> – 868MHz radio control system for remote operation of the door from a vehicle or control room. FAAC Plug-in radio receiver supplied with 1 twin channel transmitter. Additional transmitters available for multi-user systems.</p> <p><u>Movement Sensor</u> – A Falcon radar movement sensor is mounted at high level, which will open the door on detection approaching traffic, or close the door on detection of retreating traffic. Using microwave technology, the sensor is adjustable so as to ignore pedestrians, or parallel traffic. <i>Please note: maximum opening height is 5m for microwave sensors.</i></p>

Note (6) – Control logic. In accordance with BS EN 12453:2001, a safety edge and photocell, or safety edge must be installed for semi-automatic (Option 1) or automatic closing (Option 2).