

		<b>product datasheet</b>	
		<b>manually operated door</b>	<b>electrically operated door</b>
<b>Technical details</b>	<p>Max width 20000mm.  Max height 6000mm<sup>(1)</sup>.  Panel thickness 52mm.  Panel U-value 0.40 W/m<sup>2</sup>/°C.  Sideroom required – refer OSP5100 series drawings.  Headroom required - 180mm.  Weight of door 20-24kg/m<sup>2</sup>.</p>	<p>Max width (1-way) 10000mm<sup>(1)</sup>.  Max width (bi-part) 20000mm<sup>(1)</sup>.  Max height 6000mm<sup>(1)</sup>.  Max door area 50m<sup>2</sup> (1-way) 100m<sup>2</sup> (bi-part)  Panel thickness 52mm.  Panel U-value 0.40 W/m<sup>2</sup>/°C.  Sideroom required – refer OSP5100 series drawings.  Headroom required 230mm.  Weight 20-24kg/m<sup>2</sup>.  Power supply 230V, 50Hz, single phase.  Opening speed 11m/min. (folding 1-way).  5.5m/min. (bi-parting).</p>	
<b>Performance</b>	<p>Performance in accordance with BS EN 13241-1:2003 (based on original Osprey tested Aug'05)</p> <ul style="list-style-type: none"> <li>• Forces for Manual Operation – Pass.</li> <li>• Operating Forces – Pass.</li> <li>• Durability of Performance – Pass (55,000 continuous cycles in 5 weeks).</li> <li>• Life expectancy – more than 20 years.</li> <li>• Wind pressure<sup>(2)</sup> - 0.7kN/m<sup>2</sup> (6m high door), 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> <p>Acoustic performance of the panel – Average weighted SRI, RW Index tested at 29dB.  Overall door 25dB.</p>		
		<b>standard details</b>	
		<b>manually operated door</b>	<b>electrically operated door</b>
<b>Type of door</b>	<p>Top hung, flat panelled, multi leaf folding doors. Doors can either be fully floating or hinged at one jamb (1-way), or both jambs (bi-part) jambs. Leaves can either hang on the back of the opening, or between the reveals, and fold inwards at 90°.</p> <p>Refer to drawings listed below for details and dimensions of individual configurations:</p> <ul style="list-style-type: none"> <li>• OSP-F1M-5101 (fully floating 1-way)</li> <li>• OSP-F2M-5102 (fully floating bi-part)</li> <li>• OSP-H1M-5103 (hinged 1-way)</li> <li>• OSP-H2M-5104 (hinged bi-part)</li> <li>• OSP-F1CM-5108 (fully floating 1-way)</li> <li>• OSP-F2CM-5109 (fully floating bi-part)</li> </ul>	<p>Top hung, flat panelled, multi leaf folding doors. Doors can have between 3 to 10 leaves folding to one jamb (1-way), or both jambs (bi-part). Leaves hang on the back of the opening, stack clear of the reveals, and fold inwards at 90°.</p> <p>Refer to drawings listed below for technical details of individual configurations:</p> <ul style="list-style-type: none"> <li>• OSP-F1P-5105 (1-way)</li> <li>• OSP-F2P1-5106 (bi-part, 1 motor)</li> <li>• OSP-F2P2-5107 (bi-part, 2 motors)</li> </ul>	
<b>Finish</b>	<p>Outside face - choice of 8 stock colours: Corus LG Plastisol in Poppy Red, Solent Blue, Ocean Blue<sup>(3)</sup>, Olive Green<sup>(3)</sup>, Goosewing Grey, Merlin Grey<sup>(3)</sup> and White, or HPS200 Ultra in Sirius Metallic Silver.  Inside face - LG Plastisol in White.  All hinges and drop bolt sleeves are black polyester powder coated in RAL 9005(M)</p>		
<p>Note (1) – Maximum width of 10000mm (1-way) or 20000mm (bi-part) for electrically operated doors are subject to the maximum door area of 50m<sup>2</sup> (1-way) and 100m<sup>2</sup> (bi-part). Maximum height for odd-leaf configurations (ie, 3, 5, 7 or 9 leaves per half) is 3800mm for manually operated, or 4500mm for electrically operated.</p> <p>Note (2) – 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.</p> <p>Note (3) – It is recommended that any door panel, which is exposed to significant direct sunlight, should be finished in a light colour. The insulation properties of the panel are so good that, if dark colours are used, the surface temperature of the panel can become unbearably hot, and the panel surface may ripple slightly, or taller panels may temporarily bow, until the temperature falls. This does not however affect the structural integrity of the door. For further advice on colour selection please consult the manufacturer.</p> <p>Note (4) – “Easyfit” acrylic vision panels are not sold as a “sealed” unit, ie, condensation may form within some units, however, windows are not prone to leaking.</p>			

<p><b>Locking and handles</b></p>	<p><u>Between pairs of leaves to all door configs.</u> A drop bolt and a black thermoplastic easy-grip pull handle are fitted internally.</p> <p><u>Active leaf to odd leaf configurations.</u> A drop bolt and a black thermoplastic easy-grip pull handle are fitted internally.</p>	<p>All door configurations Drive motor(s) automatically lock the door in the closed position.</p> <p>A black aluminium pull handle is fitted internally to each leading edge to enable hand operation.</p>
<p><b>Drive system</b></p>	<p>Not applicable</p>	<p>One or two Ovitro TVRFC drive motors operate the door. Motors are mounted at the end of the top track and are connected to the leading edge pendant hanger via a continuous overhead drive chain. The folding action of the leaves is achieved via a built in throwout track arrangement fixed to the top track.</p> <p>Larger bi-parting doors are be fitted with two motors. Motors will be rated 0.55kW or 0.75kW subject to door size and configuration.</p> <p>A Westrow Type 1 inverter control panel, with soft start / stop is supplied with each motor. Parameters are factory set. Top track mounted proximity sensors automatically slow down and stop the door in the fully open and closed positions.</p>
<p><b>Operational controls</b></p>	<p>Open and close door by hand. Automatic hold-open latch to retain pairs of leaves in fully open position.</p>	<p>Open / close / captive stop push button unit to each control panel. Standard operation is Deadman - continuous push to open, continuous push to close. Captive stop button disables both open and close commands.</p> <p>Bi-folding doors with two motors are wired so that each door half is independently operated.</p> <p>Low-level release chains allow each motor to be de-clutched for hand operation.</p> <p><b>Note:</b> Unless additional closing safety features are installed, ie, photocell or safety edge, the door must be wired for Deadman, with the push button located so that the user has full view of the opening at all times.</p>
<p><b>Panel construction</b></p>	<p>Panels are constructed from 1.6mm thick cold rolled galvanised dovetail channel frames with 5mm thick local reinforcement for hardware. The frame is covered on both sides with 0.7mm thick steel sheets and pressure injected with CFC-free polyurethane foam to form an extremely strong, rigid, flat panel.</p>	
<p><b>Seals</b></p>	<p>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.</p>	
<p><b>Top / bottom tracks and gear</b></p>	<p>The top track is a 5 mm thick pressed steel 'C' section for direct sidewall mounting. Pendant hangers are heavy-duty fabrications, each with a Ø72 mm sealed bearing wheel, two Ø40 mm side thrust sealed bearing wheels and a Ø20 mm toughened steel shaft. Each pendant is vertically adjustable.</p> <p>The bottom guide channel is a 3 mm thick galvanised steel pressing with built in threshold and chamfered edges. Bottom guides are Ø35 mm nylon rollers running on Ø16 mm stainless steel shafts.</p>	
<p><b>Intermediate hinges</b></p>	<p>Apex hinge pairs are machined from solid aluminium extrusions, fitted with sealed for life Igus 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). Bottom hinges for "hinged to the jamb" doors are fitted with a pair of stainless steel thrust bearings.</p>	

**options**

**manually operated door**

**electrically operated door**

**Finish**

Option 1  
 Outside faces of panels are polyester powder coated in a choice of 40 stock RAL colours. Inside face in LG Plastisol in White. All hinges and drop bolt sleeves are black polyester powder coated in RAL 9005(M).

Option 2  
 Inside and outside faces of panels 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).

**Vision panels**

Option 1  
 Black thermoplastic 'easyfit' <sup>(4)</sup> window frame with double-glazed clear acrylic safety glass. Overall frame size 680mm x 390mm.

Option 2  
 Aluminium window frame with one-piece inner liner tray. Window units are double glazed (4~20~4), argon filled, low E toughened glass. Frames are polyester powder coated in matt black to RAL 9005(M), fully sealed, and available in a choice of frame sizes as follows:  
 400mm x 600mm  
 600mm x 600mm  
 400mm x 1200mm  
 600mm x 1200mm

**Wicket door**

Option 1  
 Standard lever furniture. Wicket door opens outwards. Hardware comprises a Briton 5520 mortise sashlock, 25mm low-profile anodised aluminium lever handles, external Europrofile cylinder with internal thumbturn, 1½ pairs of stainless steel butt hinges and a hidden door limiting stay. 85mm high step with 40mm wide aluminium threshold strip.

Option 2  
 Emergency escape furniture. Wicket door opens outwards. Hardware comprises a Briton 379 panic bar, external override cylinder and finger latch, 1½ pairs stainless steel butt-hinges and a hidden overhead door limiting stay. 85mm high step with 40mm wide aluminium threshold strip.

**Locking and handles**

Between pairs of leaves to all door configs.  
 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.

Active leaf to odd leaf configurations <sup>(1)</sup>  
 The active leaf to be used as a full height pass door. Hardware comprises a Briton 5520 mortise sashlock, a pair of black Hewi lever handles, external Europrofile cylinder and internal thumbturn.  
**Note:** maximum door height 3800mm for odd leaf doors. <sup>(1)</sup>

Floor Bolt  
 For additional security, a waist height lever handle is fitted to the jamb panel, which engages a 30 x 10 mm steel bar into the floor track. Interlocked to the control panel to stop the door being electrically opened if the bolt is engaged.

Haul Chains  
 Low-level haul chains attached directly to the motor to mechanically move the door in the event of power failure.

**Safety equipment**

Safety Edges

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 can not close automatically in the event of damage or failure of the edge.

Photocells

A thru-beam synchronized photocell is fitted. Each photocell comprises a transmitter and a receiver, which sends a beam between the two. 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. If an opening safety beam is broken during the opening cycle, the door will automatically stop.

Traffic Lights

A red and green 230VAC LED traffic light is fitted to each door half. Each light is sized 150mm diameter and supplied with a fixing bracket. Sequence of operation is Red light on when door closed or part closed, Green light on when door fully open. A Bernstein 24Vdc limit switches is supplied to monitor the fully open position.

Photocell / Traffic Light Posts

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.

**Operational controls**

Direct on line control panel – Westrow 900K DOL control panel – basic starter without inverter control. Incorporates safety inputs for safety edge and photocell. Power supply required 415V, three phase, 20 amps. Available only on doors upto 25m<sup>2</sup> maximum area.

Control Option 1 - Semi-automatic - Single push to open, Single push to close. Stop button stops, and holds doors. **Note:** A photocell or safety edge must be incorporated with this option.

Control Option 2 – Fully-automatic - Single push to open, automatic closing after pre-set pause time (default 60 seconds). Stop button stops, and holds doors. Close button overrides timer and closes door. This option uses the Westrow AS2 control board. **Note:** A photocell or safety edge must be incorporated with this option.

Push Button – Additional Open / close / captive stop push button unit.

Keyswitch – Sprung return keyswitch in separate enclosure for opening of the door by keyholders only. For internal or external use.

Digi-key – Bewator K42 stainless steel codelock for operation of the door by authorised persons only. For internal or external use.

Radio Control – 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.

Microwave Sensor – High level sensor to open the door on detection of oncoming vehicles. Adjustable so as to ignore pedestrians, or parallel traffic. **Note:** maximum opening height is 5m for microwave sensors.