

# Architectural Solutions Guide: Door Automation



**Safe  
Secure  
Accessible**

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Ironmongery

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Doorsets

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Access Control

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Door Automation

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Handrail & Balustrade

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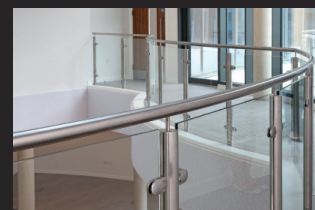
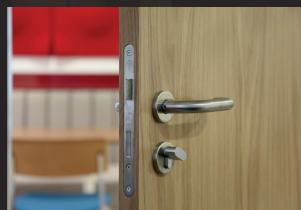
# Safe Secure Accessible

Lloyd Worrall is a premier architectural solutions provider to the commercial, education, health, retail, leisure, accommodation and housing sectors of the construction industry through consultation, specification and end-user interaction.

We provide the complete solution in:

- **Commercial Doorsets**
- **Architectural Ironmongery**
- **Access Control**
- **Door Automation**
- **Modular Handrail and Balustrade Systems**

Each business works closely with architects, key specifiers and construction design teams offering a comprehensive service including performance specifications, scheduling services, quotations, full ironmongery doorset packing and installation services for our handrail, balustrade, access control and door automation solutions.



Our goal at Lloyd Worrall is to ensure that we always deliver solutions that promote a safe, secure and accessible environment.

# Low Energy Swing Door Operators



## ED 100LE

- Low energy, slow moving door.
- Opening and closing forces less than 67N.
- Maximum opening speed 27° per second.
- Opening and closing safety sensors optional (risk assessment).
- Maximum door width 1100mm.
- Maximum door weight 100kg.

Technical information available upon request.



## ED 250LE

- Low energy, slow moving door.
- Opening and closing forces less than 67N.
- Maximum opening speed 27° per second.
- Opening and closing safety sensors optional (risk assessment).
- Maximum door width 1600mm.
- Maximum door weight 250kg.

Technical information available upon request.

The low energy swing door operators offer a range of operating modes which enable the door to be opened under power when required and used as a conventional manual swing door at all other times.

Both units open the door at precisely controlled speeds and forces assuring safety for all users. In the majority of applications they do not require additional safety equipment. They are not only extremely safe but are substantially less expensive than traditional automatic swing door operators.

## Features

- Elegant visual appearance - the Contur design provides an operator height of only 70mm.
- Low noise levels through multi-stage gearing.
- Efficient closing due to an electronic latching action enabling the motor to support the spring to overcome door seals, room to room pressure differentials and wind loads.
- Optional additional safety - compatible with IRS safety sensors.
- Optional integrated door co-ordinator to ensure the correct closing of rebated double doors.
- For single or double-leaf swing doors.
- Manual use or activation push pad, linking to access control systems and other actuation devices
- Suitable for use on projects to meet BS EN 16005.
- Ideal for room access and entrance doors to meet the relative legislative requirements for disabled access.
- The pull version with slide channel and the push version with standard arm are both suitable for use on emergency escape and fire doors.





# Automatic Swing Door Operators



## ED 100A

- Full energy, fast moving door.
- Maximum opening speed 50o per second.
- Requires opening and closing safety sensors.
- Maximum door width 1100mm.
- Maximum door weight 100kg.

Technical information available upon request.



## ED250 A

- Full energy, fast moving door.
- Maximum opening speed 60o per second.
- Requires opening and closing safety sensors.
- Maximum door width 1600mm.
- Maximum door weight 250kg.

Technical information available upon request.

Both units have an identical contemporary, unobtrusive design which is impressively small allowing them to blend in with the most architecturally sensitive environments.

Features such as the ESM Energy Saving Mode function and Wind Load Control contribute towards reducing a buildings carbon footprint.

## Features

- Elegant visual appearance – the Contur design provides an operator height of only 70mm.
- Low noise levels through multi-stage gearing.
- Efficient closing due to an electronic latching action enabling the motor to support the spring to overcome door seals, room to room pressure differentials and wind loads.
- Optional integrated door co-ordinator to ensure the correct closing of rebated double doors.
- For single or double-leaf swing doors
- Activation via radar, push pad, linking to access control systems and other actuation devices
- Suitable for use on projects to meet BS EN 16005.
- Suitable for room access and entrance doors to meet the relative legislative requirements for disabled access.
- The pull version with slide channel and the push version with standard arm are both suitable for use on emergency escape and fire doors.



# Sliding Door Operators



## ES 200

- Available as single slide, bi-parting and telescopic.
- Maximum door weight 320kg (2 x 160kg).
- 2 available cover sizes: 100mm and 150mm.
- Electro mechanical lock available.
- Maximum opening speed 700mm per second.
- Maximum closing speed 500mm per second.

## Features

- Tested to 1,000,000 cycles.
- 5 function programme for Automatic, Partial Open, Exit Only, Permanent Open, Night/Bank operation.
- Electromechanical locking option for integrated concealed locking solutions.
- Ideal for high traffic environments and emergency escapes.
- Can be integrated with curtain walling systems for most building types.
- Suitable for use on emergency escape routes.
- Ideal to meet the relative legislative requirements for disabled access.



## CS 80 Magneo

- Available as single slide only.
- Low energy application in accordance with DIN 18650 and BS 7036.
- On wall or In wall mounted.
- For use with glass, timber or aluminium door types.
- Electromagnetic drive operation
- Maximum door weight 80kg.
- Maximum door width 1190mm.

Technical information available upon request.

## Features

- For interior use.
- Silent operation making the unit ideal for home or office environments.
- Sleek contour 62mm/75mm operator height for minimum visual interruption.
- Anodised or stainless finishes to suit.
- Activation via push button, radar "push and go", manually and adjusted to permanent open function.

## Energy Saving Sliding Door System



### ST FLEX Green

- Energy saving, automatic sliding door system.
- System U value of 1.4 to 1.8 W/m<sup>2</sup>k.
- Fine framed with double glazed units.
- Available in a range of finishes.
- Suitable for use on escape doors.

Technical information available upon request.

### Features

- Excellent insulation features thanks to interlocking side seals and top and bottom seals.
- Monitored battery back-up system suitable for use on emergency escape routes.
- Activation via radar, push pad or access control (further options on request).
- Ideal for most projects where tested thermal system performance is required.
- Ideal to meet the relative legislative requirements for disabled access in the UK.
- The ST Flex Green satisfies the requirements of the latest energy-saving building regulations for England and Wales – Approved Document L (2010).

## Secure Sliding Door System



### ST FLEX Secure

- Burglar resistant fine framed automatic door system.
- Tested burglar resistance RC2.
- Secure 4-point locking device.
- Special burglar resistant laminated safety glass (single or double).
- Suitable for use on escape routes.
- Continuous floor guide rail.

Technical information available upon request.

The ST FLEX Secure sliding door system has been especially designed to provide maximum security. The system offers an unparalleled level of security and meets the increasing demand of facility operators for a solution that combines the convenience of an automatic sliding door with additional anti-intruder and anti-vandalism protection.

### Features

- Functionality as a high usage automatic sliding door in normal use.
- Ideal to meet the relative legislative requirements for disabled access in the UK.
- Monitored battery back-up system suitable for use on emergency escape routes.

# Revolving Doors



## KTV

- Available in 4 variations: Automatic, Manual, Servomatic and Manual Positional.
- 3 or 4 wing doors available.
- Floor mounted or ceiling mounted power drives available.
- Night shields available.
- Flexible design options to meet project specific requirements.

Technical information available upon request.

KTV revolving doors effectively reduce noise, dust and dirt as well as greatly contributing to a reduction in building climate control when compared with conventional automatic doors.

### Operation Options:

KTV-A: Automatic revolving door activated by motion sensors and protected by presence sensors. Floor mounted or ceiling mounted drive unit.

KTV-M: Manual revolving door activated and rotated by the user pushing a handle.

KTV-S: Servomatic revolving door. A manually activated door with assistance on demand to make the door light and easy for the user to rotate. Floor mounted or ceiling mounted drive unit.

KTV-P: Positional manual revolving door with floor mounted or ceiling mounted drive unit. The door is activated manually however returns to the optimal "X" position to maximise the environmental control effectiveness of the door.



***N.B. When specifying a revolving door a pass door is recommended to meet the relevant disabled access requirements in the UK.***

## Features

- Any inside diameter of door can be supplied from 2000 – 3400 mm.
- Clear passage heights up to 3800mm (diameter dependant).
- Flexible design options to meet project specific requirements.
- Greatly improved building environmental control.
- Glazed or solid canopy.
- Robust framing or fine frame option.

# Space Saving Door System



## FFT FLEX Green

- Maximum clear opening widths in tight spaces.
- Folding door system.
- Maximum clear opening 2.4m.
- Available in single or double folding doors.
- Thermal separation for energy efficiency.
- Wind load resistance.
- For use on emergency exits and escape routes.
- A range of finishes available.

Technical information available upon request.

The wide folding door requires very small space when folded open – to the side, to the front and to the rear. With a height of 2.5m FFT FLEX Green offers 2 options for opening doorsets:

- Bi-parting opening doorset: up to 2.4 m
- Unilateral opening doorset: up to 1.2 m

The folding door is suitable for both external doors and internal doors in narrow passageways as well as barrier-free access points in public buildings.

## Features

### Efficient thermal separation

The thermal separation with low thermal transmittance values enables a sustainable and reliable system to support the planning of an energy efficient building. We support our customers with the computation of their specific thermal transmittance value.

### Enhanced wind load resistance

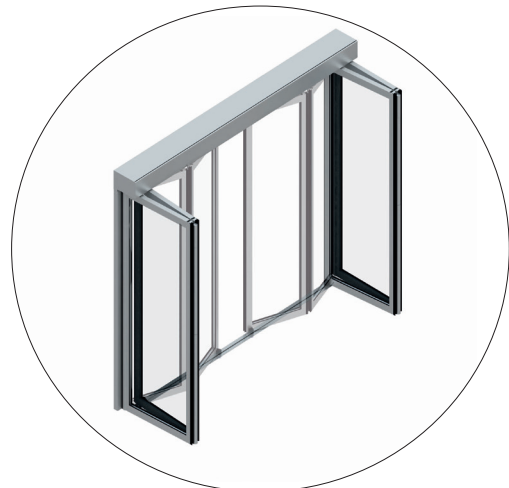
The innovative operating system of FFT FLEX Green detects wind loads and compensates accordingly to guarantee a smooth opening and closing behaviour.

### More performance, less wear

The intelligent operator transmits its power without toothed belts for significant gains in dynamic response and silent efficiency. The doorset thus opens and closes particularly quickly, yet also quietly and with minimum wear.











### For emergency exits and escape routes

The DualDrive technology ensures emergency escape in any situation. A reliable opening and closing of the door is guaranteed by the fact that the system self-monitors on a continuous basis. In case of power failure an integrated battery pack provides for the reliable operation.





## Swing Door Activation and Safety Accessories

	<p><b>Motion sensor</b></p> <p>RADEC P&amp;F</p> <p>Product Code: LWG-0001DA</p>		<p><b>Safety sensor</b></p> <p>900mm double module</p> <p>Product Code: LWG-0005DA</p>
	<p><b>Square push pad</b></p> <p>114mm x 114mm Hardwired or wireless With disabled logo</p> <p>Product Code: LWG-002DA</p>		<p><b>Touch free round push pad</b></p> <p>Hardwired or wireless With disabled logo</p> <p>Product Code: LWG-0006DA</p>
	<p><b>Touch free narrow style push pad</b></p> <p>Hardwired or Wireless With disabled logo</p> <p>Product Code: LWG-003DA</p>		<p><b>Remote control key fob</b></p> <p>Product Code: LWG-0007DA</p>
	<p><b>Post for Touch Free Narrow Style Push Pad</b></p> <p>Stainless steel</p> <p>Product Code: LWG-0004DA</p>		<p><b>F-shaped barrier</b></p> <p>Stainless steel Glass infill</p> <p>Product Code: LWG-0008DA</p>
	<p><b>Finger Protection</b></p> <p>Retractable high performance guard</p> <p>Product Code: LWG-2970</p>		<p><b>Finger Protection</b></p> <p>Heavy duty rubber guard</p> <p>Product Code: LWG-2940</p>

## Accessories



**Disabled wheelchair logo sign**

Product Code:  
LWG-0009DA



**Automatic Door Sign**

Product Code:  
LWG-0014DA



**Keep Clear Sign**

Product Code:  
LWG-0010DA



**DORMA ED100/200 standard push arm**

Product Code:  
LWG-0015DA



**ED100/200 extended push arm**

Product Code:  
LWG-0011DA



**DOMA ED100/200 slide/pull arm**

Product Code:  
LWG-0016DA



**Spindle extension**

Available sizes:  
30mm, 60mm, 90mm

Product Code:  
LWG-0012DA



**LWG 3 position key switch**

Single gang  
Narrow style

Product Code:  
LWG-0017DA



**PSU**

Battery back up

Product Code:  
LWG-0013DA



**LWG cable loops**

Product Code:  
LWG-0018DA

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