



# Simply the widest folding door

# Simply the widest folding door on the market – FFT FLEX Green.

Maximum clear opening width of 2.48m in tight spaces. Offering the best thermal separation.



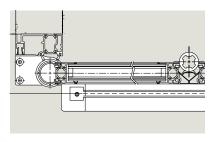
04

Maximum opening widths



06

Thermal separation and wind load resistance



80

Technical details



## The FFT FLEX Green folding door shows just how much you can get out of a small space.

#### Convincing benefits:

- Maximum space gain with opening width of up to 2.48m
- Excellent thermal separation
- Enhanced wind load resistance
- Very quiet, dynamic operating system
- Suitable for installation in emergency escape routes to EN 16005





#### dormakaba Service

Offering a comprehensive maintenance and repair service, DORMA can help with the enduring functional integrity and safety of your doorsets long-term.





# The only folding door with maximum escape route widths

Maximum opening within tight structural widths. And certified for escape routes.

Wherever tight spaces need to be opened up for wide access, that's where the FFT FLEX Green folding door comes into its own. It offers a particularly suitable solution where a small structural width has to be utilized to the full for as wide an opening width as possible. This then enables maximum emergency escape widths.

#### A viable option for emergency exits and escape routes

With their proven DualDrive technology, our folding doors offer a persuasive and operationally dependable solution for emergency exits and escape routes.

- Reliable opening and closing of the door thanks to integrated backup battery module
- Emergency exit security even in the case of a power failure
- Safeguarded functionality with self-monitoring sensors



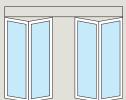


#### Convincing benefits

- Very small space requirement when folded open – to the side, to the front and to the rear
- Suitable for both external doors and internal doors in narrow passageways
- Ideal for barrier-free access points in public buildings
- Particularly suitable for emergency exits and escape routes



During their opening cycle, the door panels are simultaneously folded and rotated to the side under automatic control



#### Bi-parting opening doorset

The two panel pairs are opened in synchronization by a bi-parting folding motion that takes them to the side, creating a maximum opening width of up to 2.48 meters.



#### Unilateral opening doorset

For smaller applications, the FFT FLEX Green folding door consisting of just one pair of panels provides for maximum opening width of up to 1.24 meters.

## From folding door to energy saver

Efficient thermal separation.

Whether it's cold or hot outside, the FFT FLEX Green folding door offers excellent thermal separation efficiency with very good thermal transmittance values (UD Values). Combined with high-quality insulation glass, they create an outstanding thermal barrier at the structural opening. To ensure the best possible planning of an energy-efficient building, we support our customers with the certified computation of their specific thermal transmittance value.

#### Convincing benefits:

- · Sustainable, reliable and energy-saving system
- Very low thermal transmittance values (UD Values) from 1.7 to max. 2.4 (also known as heat transfer coefficient)
- Individual UD Value certificates for each FFT FLEX Green door system
- · Tested quality with approval
- Glass panes with rugged but elegant frames



## Quieter. More Dynamic. More resistant to wind loads.

With an operator system full of useful functions.

The folding door features an innovative, intelligent drive system offering improved operating smoothness, increased dynamic response and enhanced resistance to wind loads.

#### More performance, less wear

The 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 less wear.

#### Low wind susceptibility

External doors are frequently exposed to wind loads. As the wind acts directly against the door panels, it can adversely affect operating behavior.

The new, intelligent operator of the FFT FLEX Green system detects wind loads\* and compensates for them accordingly. The operating parameters are dynamically modified according to requirements in order to adapt closing behavior to the prevailing weather situation.





#### Smooth, quiet operation

Through the use of a carrier borne by five rollers, even very large panels will open and close quietly and smoothly.

# Certified user safety and performance characteristics to EN 16361

- Shock resistance
- · Resistance to driving rain
- Resistance to wind load\*
- Thermal transmittance value
- Air permeability
- Resistance to impact

<sup>\*</sup>depending on door size, up to Beaufort Force 8

## The equipment features

| Door type                                   |  | FFT FLEX Green<br>(Standard) | FFT FLEX Green – DualDrive<br>(Emergency escape) |
|---|--|------------------------------|--|
| Operator unit                               |  | ES 200 FFT                   | ES 200-2D FFT                                    |
| Door parameters                             |  |                              |  |
| Single-panel folding door                   | Clear opening width (LW)1<br>Max. panel pair weight                    | 840–1240 mm<br>1 x 90 kg     | 900–1240 mm<br>1 x 90 kg                         |
| Double panel folding door                   | Clear opening width (LW)1<br>Max. panel pair weight                    | 980–2480 mm<br>2 x 90 kg     | 980–2480 mm<br>2 x 90 kg                         |
| Clear passage height <sup>1</sup>           |  | 2100-2500 mm                 | 2100-2500 mm                                     |
| Technical data                              |  |                              |  |
| Suitable for use in emergency e             | exits and escape routes  | -                            | •  |
| Opening and closing force (max. 150 N)      |  | •                            | •  |
| Opening speed (incremental adjustment)      |  | 10-75 cm/s                   | 10-75 cm/s                                       |
| Closing speed (incremental adjustment)      |  | 10-50 cm/s                   | 10-50 cm/s                                       |
| Hold-open time                              |  | 0-180 s                      | 0-180 s  |
| Installed load, frequency                   |  | 230 V, 50/60 Hz              | 230 V, 50/60 Hz                                  |
| Power consumption                           |  | 250 W                        | 250 W  |
| Type of protection                          |  | IP 20                        | IP 20  |
| Temperature range                           |  | −20 bis + 60 °C              | −20 bis + 60 °C                                  |
| Permissible humidity (relative)             |  | Max. 93% (non-condensing)    | Max. 93% (non-condensing)                        |
| Tested in accordance with low-              | voltage directives   | •                            | •  |
| Basic module                                |  |                              |  |
| Modular design                              |  | •                            | •  |
| Microprocessor control                      |  | •                            | •  |
| Functional programs                         | Off Automatic Permanent-open Partial-open Exit only Night-bank control | •                            | •  |
| Automatic reversing                         |  | •                            | •  |
| Connection for bi-stable electron           | omechanical locking device   | •                            | •  |
| Connection for presence sensor (both sides) |  | •                            | •  |
| Equipment according to EN 16005             |  | •                            | •  |
| Adjustment of all basic parame keypad       | eters via integrated display and                                       | •                            | •  |
| Parameter configuration by PD               | )A   | •                            | •  |
| Emergency opening/emergency                 | v closing (if battery pack installed)                                  | •/ •                         | ●/-<br>(Battery pack as standard)                |

| Door type  | FFT FLEX Green<br>(Standard) | FFT FLEX Green – DualDrive<br>(Emergency escape) |
|--|------------------------------|--|
| Operator unit  | ES 200 FFT                   | ES 200-2D FFT                                    |
| Basic Module   |                              |  |
| Emergency rechargeable battery (if battery pack installed) | •                            |  |
| Synchronous bi-parting                                     | •                            | •  |
| 24V output for external loads                              | •                            | •  |
| Retrievable fault log memory with error codes              | •                            | •  |
| DCW® bus connection (DORMA Connect and Work protocol)      | •                            | •  |
| Function module  |                              |  |
| Door status contact (3 x)                                  | 0                            | 0  |
| Safeguarding of main and secondary closing edge/s          | 0                            | -  |
| Panic closing function (Observe regulations!)              | 0                            | -  |
| Bell contact   | 0                            | 0  |
| Airlock control  | 0                            | 0  |
| Function module to DIN 18650 and EN 16005                  |                              |  |
| Monitored secondary closing edge sensors <sup>2</sup>      | 0                            | 0  |
| Manual lock release for electromechanical locking device   | 0                            | 0  |
| Light curtains   | 0                            | 0  |
| Rechargeable battery pack (emergency opening/closing)      | 0                            | 0 /-   |
| Standard O Optional - No                                   |                              |  |

<sup>&</sup>lt;sup>1</sup> Different values on request <sup>2</sup> Enable tested monitoring of the secondary closing edges

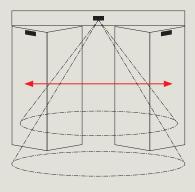
# The system components of the dormakaba sensor portfolio

Automatic doors are subject to the highest safety demands in accordance with EN 16005. In order to meet these, self-monitoring sensors are mandatory.

#### Convincing benefits:

- Advanced, standards-compliant technologies:
  - Compact sensors with microwave

    Doppler technology for pulse generation
  - Combination sensors with active infrared technology for simultaneous pulse generation and passage protection
  - Active infrared motion detectors based on the triangulation principle for protection of users or obstructions located in the panel travel path
- Single-source planning, maintenance and support





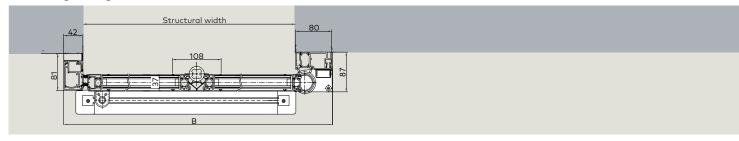
Advanced sensor technology based on an intelligent system aligned to providing appropriate components for all kinds of individual requirements.

Moving sensors optional. Not suitable for use in emergency escape routes.

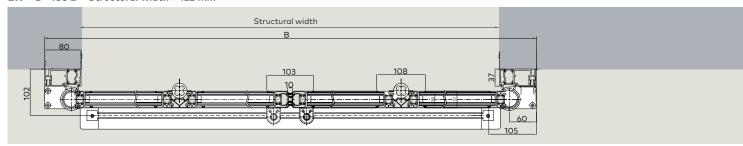
## The technical details

# FFT FLEX Green. For exceptional thermal separation.

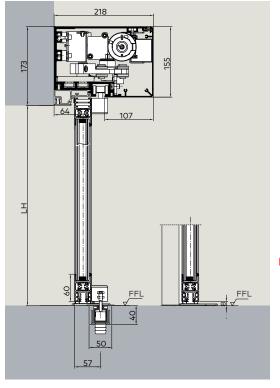
#### Wall fixing arrangement

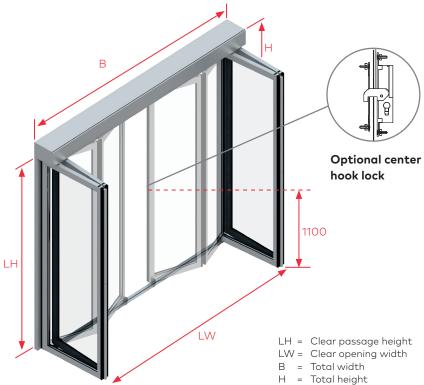


Unilateral opening door set: (B (minimum) = 1028 mm / B (maximum) = 1428 mm) LW = B - 188 B = Structural width + 122 mm



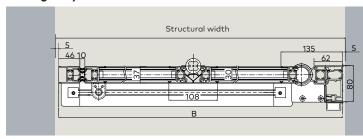
Bi-parting door set: (B (minimum) = 1260 mm / B (maximum) = 2760 mm) LW = B - 280 B = Structural width + 160 mm



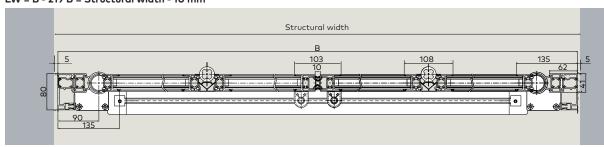


Installation with fl oor guide track always recommended for LW > 1500 mm and unilateral opening

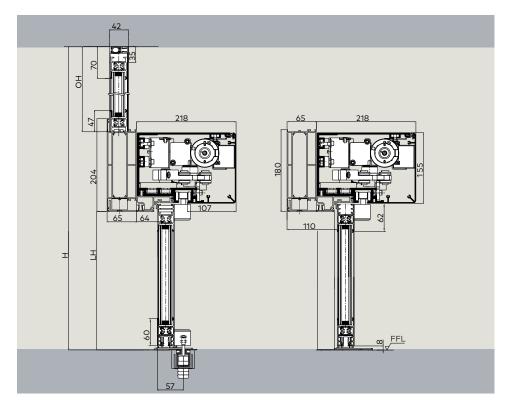
#### Passageway or corridor installation



Unilateral opening door set: (B (minimum) = 1059 mm / B (maximum) = 1459 mm) LW = B - 219 B = Structural width - 10 mm



Bi-parting door set: (B (minimum) = 1314 mm / B (maximum) = 2814 mm) LW = B - 334 B = Structural width - 10 mm



LW > 1500 mm and unilateral opening Installation with fl oor guide track always recommended for LW > 1500 mm and unilateral opening

The executable plant dimensions (Especially the passage height LH and the passage widtht LW) depending on

- Glass type / door leaf weight
- Door leaf format (Height to width)
- Wind load ratios in the object
- Door leaf guide

The dormakaba sales team will be pleased to support you.

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