

# You'll never know its there until you need it!

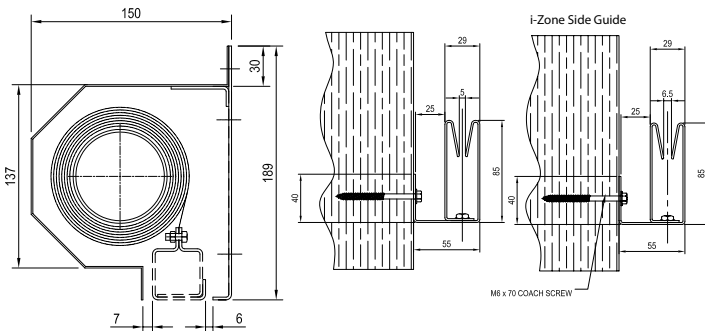
The ViiFire Door is a compact fully automatic motorised roller system with a high temperature stainless steel reinforced curtain, tested up to 1000°C, concealed in a strong steel casing above the doorway or opening. It remains hidden but ready to work – in the event of a fire. It is easy for a competent person to install and the first and only 'plug and play' system.

The ViiFire Door can be either a main alarm controlled or a standalone Fire Curtain safety system, replacing traditional fire doors in corridors, lobbies or 'compartments'. The system only deploys in the event of a fire, total power or system failure (as required by regulation) or manual activation. The system specification must be approved by an authorised person ie Building Control.

## Design Specification

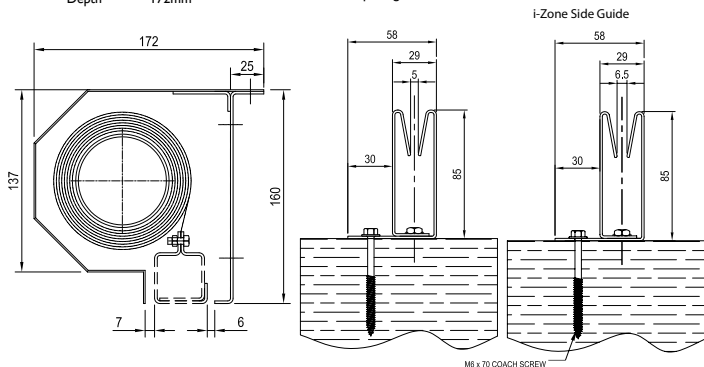
### Face Fixed

|          |       |       |             |         |      |
|----------|-------|-------|-------------|---------|------|
| Headbox: | Back  | 189mm | Side Guide: | Width   | 55mm |
|          | Front | 137mm |             | Depth   | 85mm |
|          | Depth | 150mm |             | Opening | 29mm |



### Reveal Fixed

|          |       |       |             |         |      |
|----------|-------|-------|-------------|---------|------|
| Headbox: | Back  | 160mm | Side Guide: | Width   | 58mm |
|          | Front | 137mm |             | Depth   | 85mm |
|          | Depth | 172mm |             | Opening | 29mm |



**Should you have any queries please contact ViiFire Technical for FREE on: 0800 783 6628**

The design caters for a standard range of opening sizes. Special sizes can be accommodated up to a maximum size of 3000mm x 3000mm.

The descent speed is adjustable and should be set to between 0.06 m/s to 0.15 m/s to comply with BS PAS 121:2007 (5.3a).

The system is designed as 'plug and play'. This means that all ancillary equipment is provided with a labeled plug that plugs into a corresponding labeled socket.

The system contains its own dedicated, self-monitoring battery back-up & emergency power system.

This system comes with an aesthetically stylish ViiFire Control panel as standard. Only the Battery, Accessory and Control fuses are on the main control box.

- ✓ **Mandatory Safety Functions**
- ✓ **Total Power Failure Gravity Fail Safe**
- ✓ **Total Wiring Corruption Gravity Fail Safe**
- ✓ **Total Control Equipment Gravity Fail Safe**
- ✓ **Safe Controlled Operating Speeds**

## Accessories

### Emergency Retract\*

Push Switch or Touch Switch  
Emergency Retract works for approximately 30 minutes depending on the size of the curtain.

\*Emergency Retract buttons are not supplied as standard. Please ensure you check with the appropriate authority if emergency retract is required.

### Voice Warning (2 Message)

Message 1 – Curtain descending  
Message 2 – Curtain obstruction

### Audio / Visual Beacon

Red Light – Flashing (not strobe) to indicate that the unit is operating.

### Bump Stop (on bottom bar)

A pressure sensitive strip on the bottom bar senses the obstruction, causing the curtain to retract, pause, play the obstruction message, then descend again. This sequence is repeated three times in a row before finally descending regardless of obstruction.

### Obstruction Light Curtain or Beam

The Light Curtain detects any obstruction within the whole opening. The Beam is a single horizontal beam, fitted at low level.

After 10 seconds of either being obstructed, the Voice Warning or Audio / Visual Beacon activates. This is a warning device only. The curtain will descend in the event of activation.

### Fire Alarm input

The system is activated from main system or heat, smoke or thermal fuse alarm inputs. Detectors can be wired in series to extend cover.

## Measuring and Ordering

1. Check all walls and surfaces are suitably fire rated.
2. Ensure all fittings, if different to the standard fittings being supplied\* are suitably fire and load rated. Refer to your fixings supplier eg Hilti, Winzer Würth etc. Coopers do not accept any responsibility if fittings other than those supplied are used. Please contact ViiFire Technical Department if you are unsure.
3. Ensure there are no obstructions e.g. pipes, cables, tiles etc.
4. Measure the width of the opening at the top, middle and bottom.

**If Face Fix** – Use the largest dimension as your Clear Opening Width.

**If Reveal Fix** – Use the smallest dimension as your Clear Opening Width.

5. Measure the height of the opening on the left, middle and right.

**If Face Fix** – Use the largest dimension as your Clear Opening Height.

**If Reveal Fix** – Use the smallest dimension as your Clear Opening Height.

6. Choosing the correct model to suit your Clear Opening Size:

**Face Fix** – Select the model with the next larger (width x height) Clear Opening Size from the Face Fix Size & Weights Chart. Please note the Clear Opening size will remain unchanged.

**Reveal Fix** – Select the model with the next smaller (width x height) Clear Opening Size from the Reveal Fix Size & Weights Chart. Please note: an additional 10mm manufacturing tolerance on height and width will be allowed. Once installed, all gaps must be suitable sealed. Refer to Accessories for details.

### General Notes

#### Made to Measure Opening

Select the appropriate Unit size you require and fabricate your opening exactly to the Clear Opening Size given in the Chart for that Model Number and Clear Opening size.

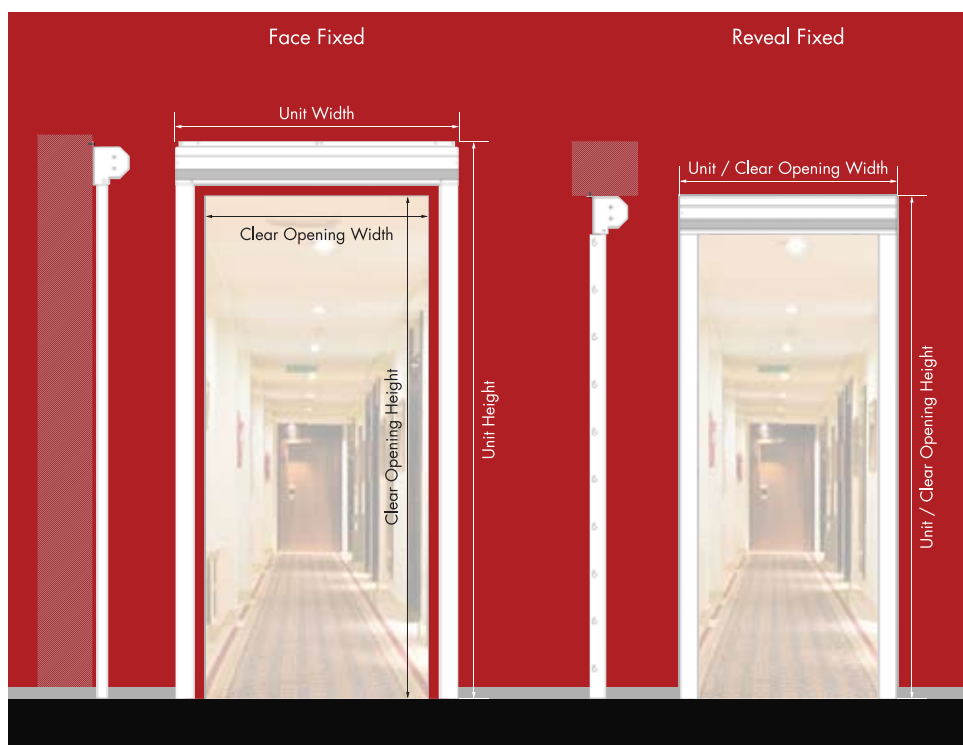
#### Made to Measure ViiFire Unit

Provide the exact Clear Opening Size (width and height) and a made to measure unit will be made for you. Please Note: an additional 10 mm on width and height will be deducted during manufacture for tolerance. Once installed, all gaps must be suitable sealed. Refer to Accessories for details.

7. Each fire curtain is supplied with a 5 metre pre-wired motor cable to the control panel. If Emergency Retract is required, the motor cable will be fire rated, typically FP200. A 2 metre mains power lead with a standard plug to fit a standard fused unswitched socket and a 5 metre two core alarm cable are also supplied. Only a qualified electrician can carry out any mains electrical connections or modifications.

8. ViiFire Doors will be supplied with the motor cable located at the left side of the headbox. If a right side cable extrusion is required, please request when ordering.

\* M6 x 70 Coach Screws



## Examples

### Face Fix

Width of Opening: 1430 (VFD-F15/\*\* model)  
Height of Opening: 1876 (VFD-F\*\*/20 model)  
= VFD-F15/20 model

Width of Opening: 847 (VFD-F09/\*\* model)  
Height of Opening: 2206 (VFD-F\*\*/23 model)  
= VFD-F09/23 model

### Reveal Fix

Width of Opening: 1312 (VFD-R12/\*\* model)  
Height of Opening: 2187 (VFD-RF\*\*/21 model)  
= VFD-R12/21 model

Width of Opening: 1246 (VFD-R10/\*\* model)  
Height of Opening: 2594 (VFD-R\*\*/25 model)  
= VFD-R10/25 model

## WIDTH

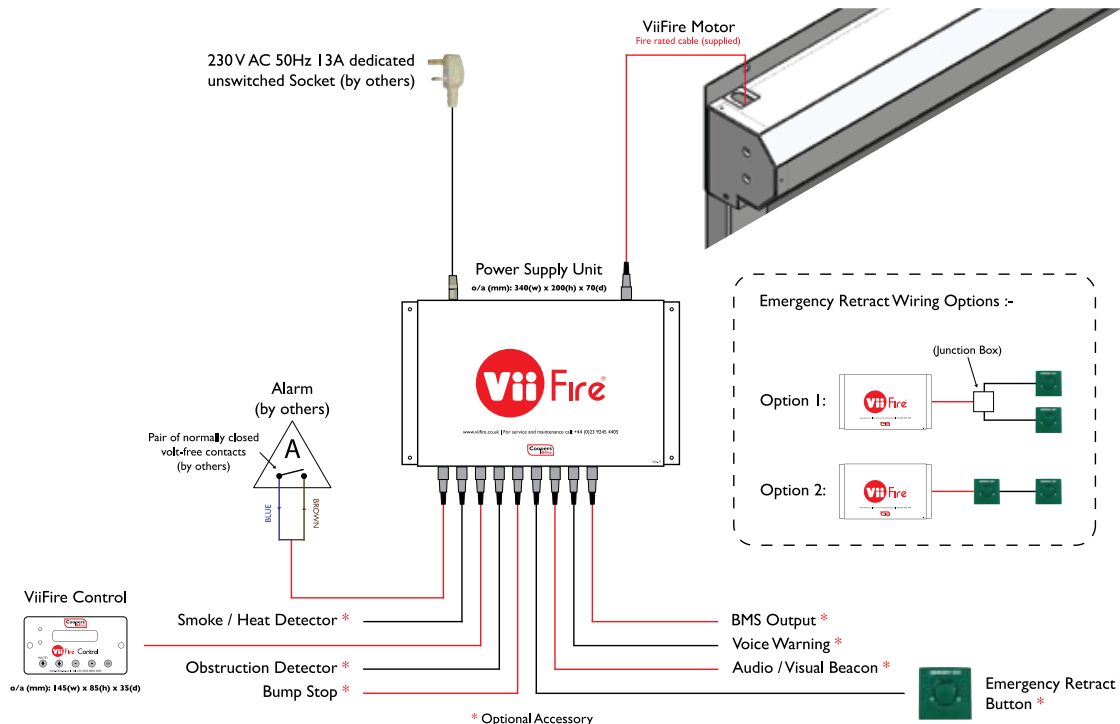
|                                |  |      |      |      |      |      |      |      |
|--------------------------------|--|------|------|------|------|------|------|------|
| Clear Opening Width (mm):      |  | 900  | 1000 | 1200 | 1500 | 2000 | 2500 | 3000 |
| Face Fix Overall Unit Width:   |  | 1070 | 1170 | 1370 | 1670 | 2170 | 2670 | 3170 |
| Reveal Fix Overall Unit Width: |  | N/A  | 990  | 1190 | 1490 | 1990 | 2490 | 2990 |

## HEIGHT

|                                 |      |                            |           |            |             |             |             |             |             |
|---------------------------------|------|----------------------------|-----------|------------|-------------|-------------|-------------|-------------|-------------|
| Clear Opening Height (mm):      | 2000 |                            |           |            |             |             |             |             |             |
| Face Fix Overall Unit Height:   | 2190 | Face Fix Product Code:     | VFD-F9/20 | VFD-F10/20 | VFD-F12/20  | VFD-F15/20  | VFD-F20/20  | VFD-F25/20  | VFD-F30/20  |
| Reveal Fix Overall Unit Height: | 1990 | Reveal Fix Product Code:   | -         | VFD-R10/20 | VFD-R12/20  | VFD-R15/20  | VFD-R20/20  | VFD-R25/20  | VFD-R30/20  |
|                                 |      | Finished Reveal Opening:   | -         | 820 x 1830 | 1020 x 1830 | 1320 x 1830 | 1820 x 1830 | 2320 x 1830 | 2820 x 1830 |
|                                 |      | Nominal Unit Weight (Kgs): | 30        | 31         | 34          | 37          | 44          | 52          | 60          |
| Clear Opening Height (mm):      | 2100 |                            |           |            |             |             |             |             |             |
| Face Fix Overall Unit Height:   | 2290 | Face Fix Product Code:     | VFD-F9/21 | VFD-F10/21 | VFD-F12/21  | VFD-F15/21  | VFD-F20/21  | VFD-F25/21  | VFD-F30/21  |
| Reveal Fix Overall Unit Height: | 2090 | Reveal Fix Product Code:   | -         | VFD-R10/21 | VFD-R12/21  | VFD-R15/21  | VFD-R20/21  | VFD-R25/21  | VFD-R30/21  |
|                                 |      | Finished Reveal Opening:   | -         | 820 x 1930 | 1020 x 1930 | 1320 x 1930 | 1820 x 1930 | 2320 x 1930 | 2820 x 1930 |
|                                 |      | Nominal Unit Weight (Kgs): | 30        | 31         | 34          | 38          | 44          | 52          | 61          |
| Clear Opening Height (mm):      | 2300 |                            |           |            |             |             |             |             |             |
| Face Fix Overall Unit Height:   | 2490 | Face Fix Product Code:     | VFD-F9/23 | VFD-F10/23 | VFD-F12/23  | VFD-F15/23  | VFD-F20/23  | VFD-F25/23  | VFD-F30/23  |
| Reveal Fix Overall Unit Height: | 2290 | Reveal Fix Product Code:   | -         | VFD-R10/23 | VFD-R12/23  | VFD-R15/23  | VFD-R20/23  | VFD-R25/23  | VFD-R30/23  |
|                                 |      | Finished Reveal Opening:   | -         | 820 x 2130 | 1020 x 2130 | 1320 x 2130 | 1820 x 2130 | 2320 x 2130 | 2820 x 2130 |
|                                 |      | Nominal Unit Weight (Kgs): | 30        | 32         | 35          | 38          | 44          | 53          | 61          |
| Clear Opening Height (mm):      | 2500 |                            |           |            |             |             |             |             |             |
| Face Fix Overall Unit Height:   | 2690 | Face Fix Product Code:     | VFD-F9/25 | VFD-F10/25 | VFD-F12/25  | VFD-F15/25  | VFD-F20/25  | VFD-F25/25  | VFD-F30/25  |
| Reveal Fix Overall Unit Height: | 2490 | Reveal Fix Product Code:   | -         | VFD-R10/25 | VFD-R12/25  | VFD-R15/25  | VFD-R20/25  | VFD-R25/25  | VFD-R30/25  |
|                                 |      | Finished Reveal Opening:   | -         | 820 x 2330 | 1020 x 2330 | 1320 x 2330 | 1820 x 2330 | 2320 x 2330 | 2820 x 2330 |
|                                 |      | Nominal Unit Weight (Kgs): | 30        | 33         | 36          | 39          | 46          | 54          | 62          |
| Clear Opening Height (mm):      | 3000 |                            |           |            |             |             |             |             |             |
| Face Fix Overall Unit Height:   | 3190 | Face Fix Product Code:     | VFD-F9/30 | VFD-F10/30 | VFD-F12/30  | VFD-F15/30  | VFD-F20/30  | VFD-F25/30  | VFD-F30/30  |
| Reveal Fix Overall Unit Height: | 2990 | Reveal Fix Product Code:   | -         | VFD-R10/30 | VFD-R12/30  | VFD-R15/30  | VFD-R20/30  | VFD-R25/30  | VFD-R30/30  |
|                                 |      | Finished Reveal Opening:   | -         | 820 x 2830 | 1020 x 2830 | 1320 x 2830 | 1820 x 2830 | 2320 x 2830 | 2820 x 2830 |
|                                 |      | Nominal Unit Weight (Kgs): | 31        | 34         | 36          | 40          | 46          | 55          | 63          |

Maximum size available (mm): Standard ViFire Curtain - 3000 x 3000 | i-Zone Curtain - 2500 x 2500

## Site layout



## Technical Specification

### Mechanical

|              |                                                                                                                                   |
|--------------|-----------------------------------------------------------------------------------------------------------------------------------|
| Headbox:     | Mild Steel 18 swg (1.2mm)                                                                                                         |
| Backplate:   | Mild Steel 18 swg (1.2mm)                                                                                                         |
| End Plates:  | Mild Steel 14 swg (2.0mm)                                                                                                         |
| Side Guides: | Mild Steel 14 swg (2.0mm)                                                                                                         |
| Bottom Bar:  | Mild Steel 14 swg (2.0mm)                                                                                                         |
| Painting:    | Polyester Powder Coated RAL 9010<br>(other finishes on request)                                                                   |
| Curtain:     | Coopers EFP 2/1000/S (Smoke Seal)<br>610 gsm stainless steel reinforced Micronised<br>Aluminium Heat Reflecting Woven Glass Fibre |

### Electrical

|                     |                                                                                                                                                                                                                  |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Motor:              | 24Vdc Gravity Fail Safe (GFS)<br>(with mandatory LSF 200 fire rated cable)                                                                                                                                       |
| Controls:           | 24Vdc Emergency Power Unit Plug<br>and Play pre-wired<br>Mild steel - 340(W) x 200(H) x 70(D)<br>(Clearance required for connectors)<br>Electronic IntelliStall® closure system                                  |
| Power requirements: | 230Vac – 50Hz via IEC power inlet (110Vac available<br>on request) 0.35A. 0.75A.                                                                                                                                 |
| Accessory fuse:     | 1A anti-surge (T1A)                                                                                                                                                                                              |
| Battery fuse:       | 3.15A anti-surge (T3.15A)                                                                                                                                                                                        |
| Control fuse:       | 100mA anti-surge (T100mA)                                                                                                                                                                                        |
| Max output:         | 27.3Vdc 2A (2.3A cut-off / motor stop)                                                                                                                                                                           |
| Batteries:          | 2 no. 12V, 1.2Ahr Sealed Lead Acid in series                                                                                                                                                                     |
| Alarm:              | Pair of normally closed volt-free contacts (by others)<br>Smoke Detector or Heat Detector, Test key-switch                                                                                                       |
| Sockets:            | Motor<br>IEC Mains In<br>Alarm<br>Detector (Smoke / Heat)<br>ViiFire Control<br>Obstruction Detector (Beam or Curtain)<br>Bump Stop<br>Emergency Retract<br>Audio / Visual Beacon<br>Voice Warning<br>BMS Output |

### ViiFire control:

The ViiFire Control is supplied to fit either a double gang surface mount box OR a flush box (by others).

LCD Display – to show Alarm / Curtain status.

Green LED – to show Alarm status.

Red LED – to show faults / warnings.

Dimensions (mm) – 145(W) x 85(H) x 35(D).

### Emergency retract:

If required, an emergency retract button is supplied for each side of the opening.

### Special Features

#### Automatic alarm system detection:

(Alarm, Detector or both)

If both are missing, the unit signals this and enters a lock-out condition. The Key switch must be in the AUTO position to enable the system to search for the alarm system.

#### Split Drop Delay:

When the ViiFire Door is activated, Split Drop Delay allows the curtain to stop after approximately 200mm. The fire curtain will remain in this position, impeding the spread of smoke, for 3 minutes before finally deploying to the Fire Operational position. (This feature is only available for unit heights of 2300mm or greater.)

## Accreditations

BS EN 1634-1:2000

BS 476-22-8:1987

BS PAS 121:2007

BS 7346-3:1990

BS 476-6:1989

BS 476-7:1997

BS 476-3 1.1:1983

ISO 9001:2000

Meets the 'self closing without power' fire safety requirement  
(Approved Document B)

[www.viifire.co.uk](http://www.viifire.co.uk)



Assessed to ISO 9001:2000  
Certificate number FM22356



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FOUNDATION  
Member



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The Company reserves the right to change product specifications that incorporate any improvements and upgrades to both electrical and mechanical components without prior notification

Coopers Fire Ltd have 30 years of Fire Life Safety experience which is supported by Public and Product liability of £10 million and Professional Indemnity of £5 million.