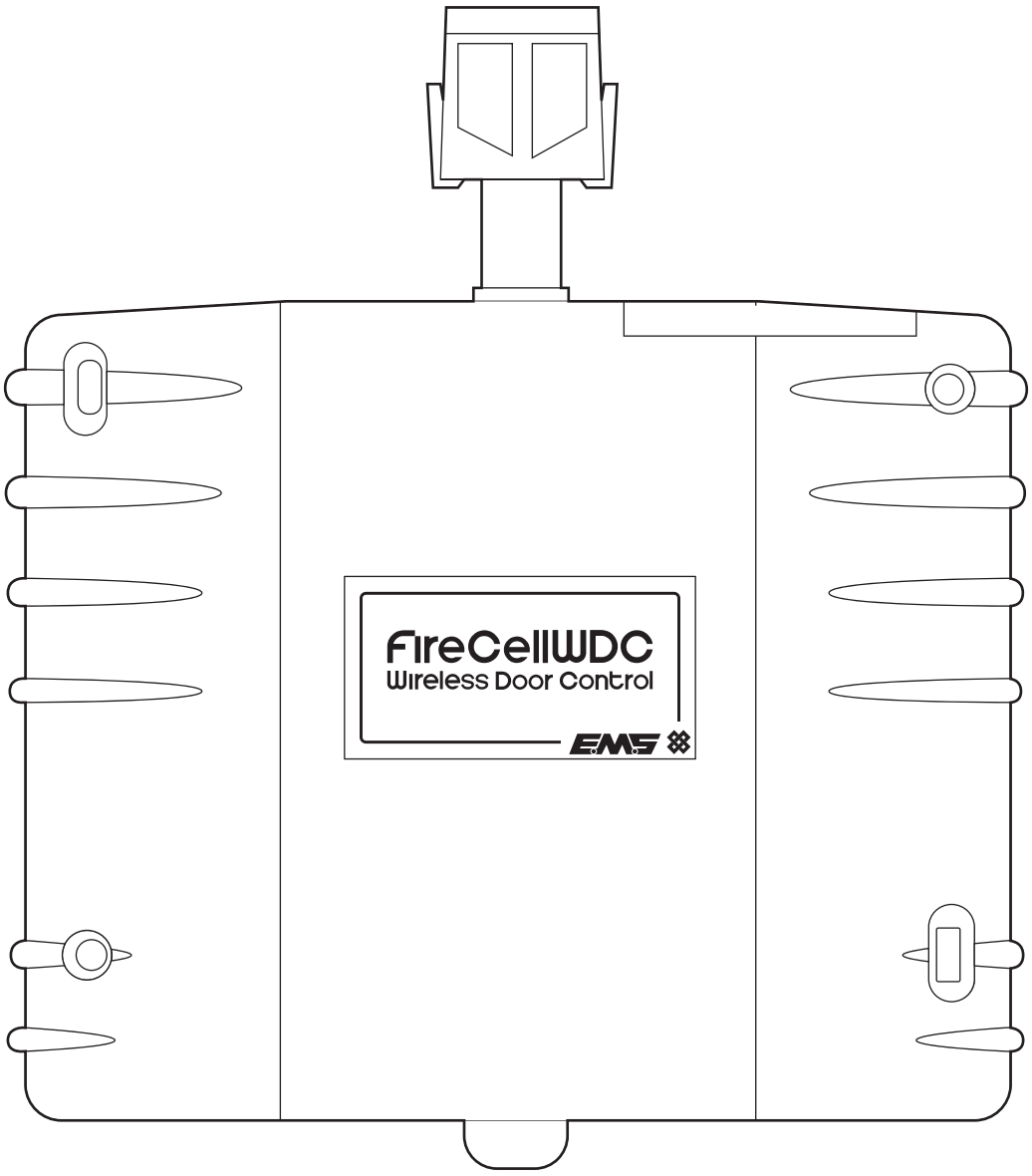
FireCellWDC
Wireless Door Control

Installation Guide



MK241-99 (Issue 7) 26/03/2025 AJM

Contents

Part number and description

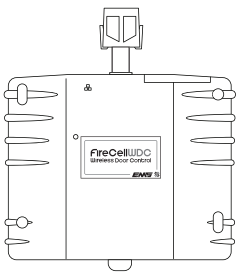
FC-60-2000	FireCell Wireless Door Control *(Black)*
FC-60-2010	FireCell Wireless Door Control *(White)*

Pre installation

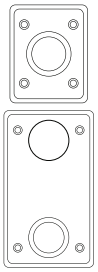
Installation must conform to applicable local installation codes and should only be installed by a fully trained competent person.

- Ensure that the device is installed as per the site survey.
- Ensure that the device is fitted to the side of the door that shuts against the door frame.
- Check that the fire door is suitable e.g. self closing, has a flat surface to fix to and has appropriate clearance under the door to accommodate the floor plate.
- The supplied ESD protection label must be fitted when installing the Wireless Door Control *(WDC)* on metal kick plates or uneven surfaces.
- Any door closing devices used in conjunction with the WDC must conform to EN 1154.
- DO NOT press the log on button on a pre-programmed device, as this will cause communication with the control panel to be lost. Should this happen, delete the device from the system and add it back on.

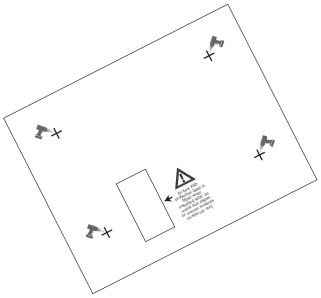
Components



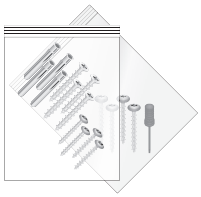
FireCell WDC



Small & large floor plates



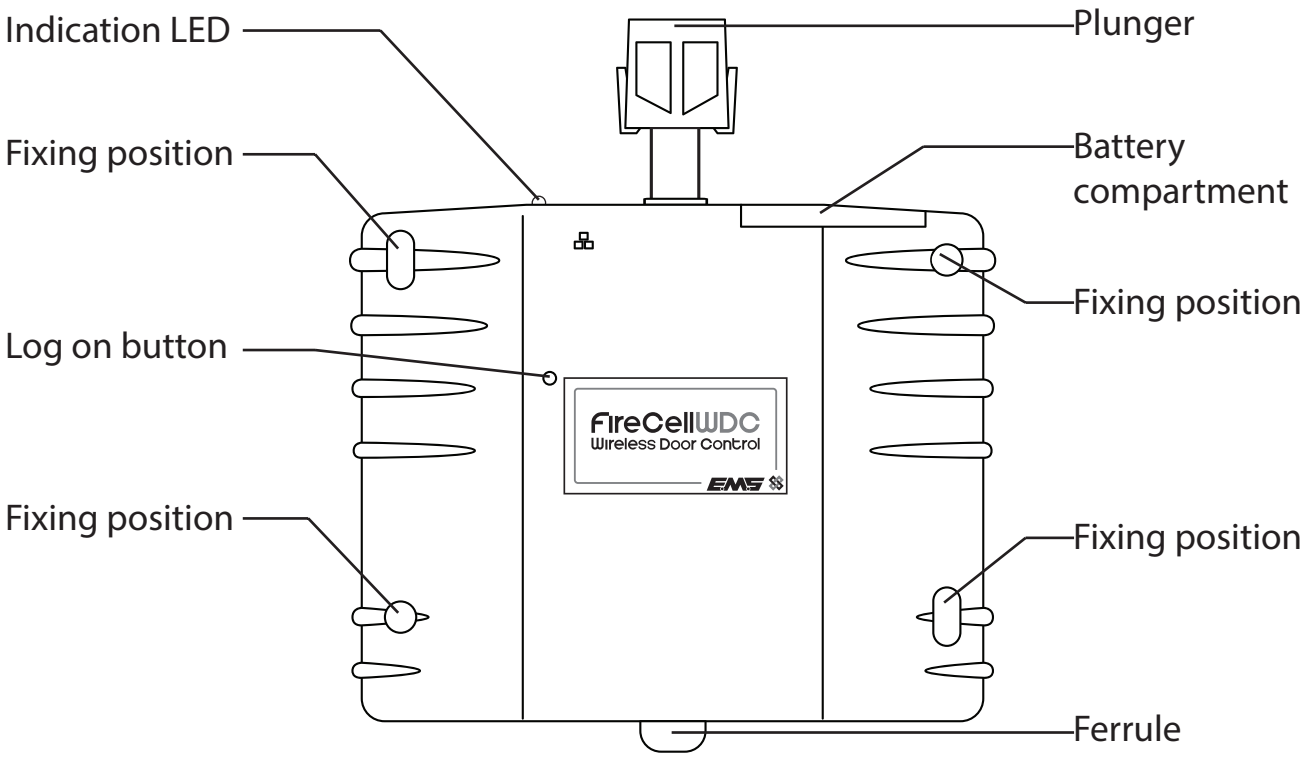
Fixing template (MK255)



Fixings

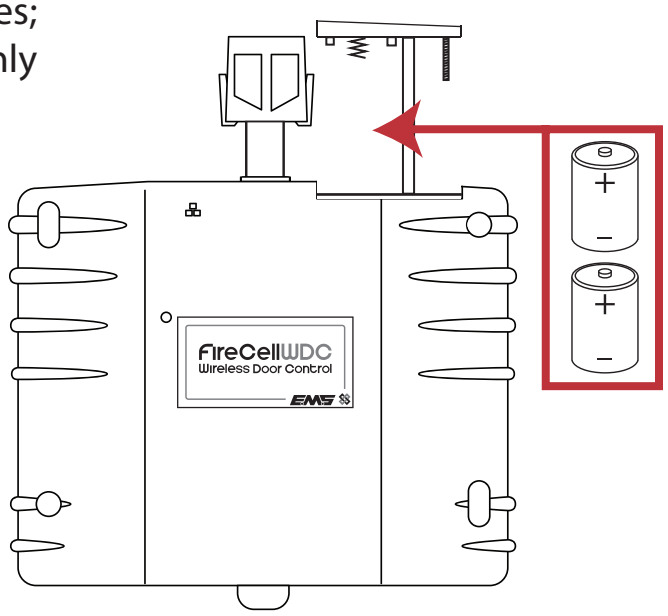
ESD protection label

Equipment familiarisation



Insert batteries

- When fitting / replacing batteries; observe correct polarity, using only specified batteries.



Note; upon first power up the device will initiate a startup sequence, denoted by a series of low pitched beeps and motor operations. This sequence will take approximately 15 seconds and concludes with three low pitched beeps.

Should the sequence close with a mix of high and low pitched beeps, refer to page 13.

Add to system - *unprogrammed systems only*

Skip this step If the device has been supplied as part of a pre-programmed system, as this will cause communication with the control panel to be lost. Should this happen, delete the device from the system and add it back on.

The device's loop address is configured within the menu structure of the radio hub. It is recommended to configure the device to the system prior to installation.

Note; devices can alternatively be added to the system after installation. If this method is to be taken, it is recommended to note the devices ident number at this stage. Skip this section and refer to the 'Post Installation Configuration' section on page 10 for details on the device's ident location.

Note; if programming the FireCell WDC to a Fusion Loop Module, refer to the Fusion Loop Module Engineers Guide *(TSD062)* for programming details.

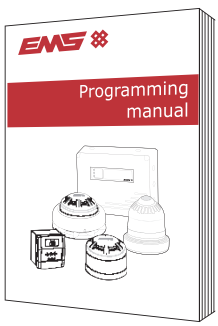
To add devices by log on (pre installation);

From front display → **Add New Device** → *Select RCC number* →

Select loop number → *Select device address number* → **Add By Log On** →

Press devices log on button > *Devices ident is shown* → *Device is now logged on* → BACK *To exit*

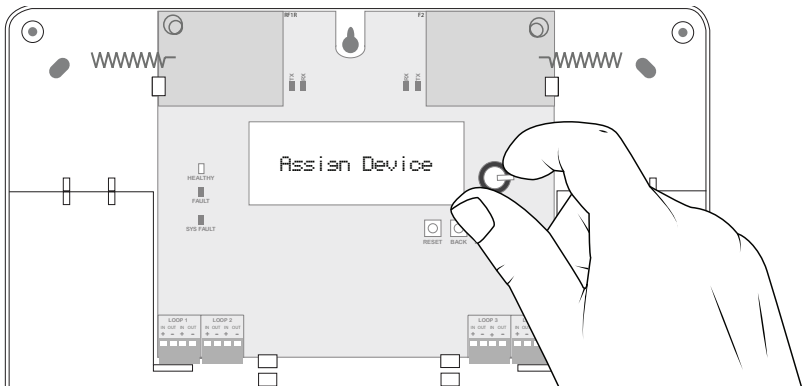
The device has now been added to the Radio Hub and should be installed in its location. For further details, refer to the FireCell programming manual *(MK98)* for full programming information.



Free to download from www.emsgroup.co.uk

Note: the device can also be programmed utilising the control panel's cause and effects, as part of the buildings evacuation plan.

Assign device



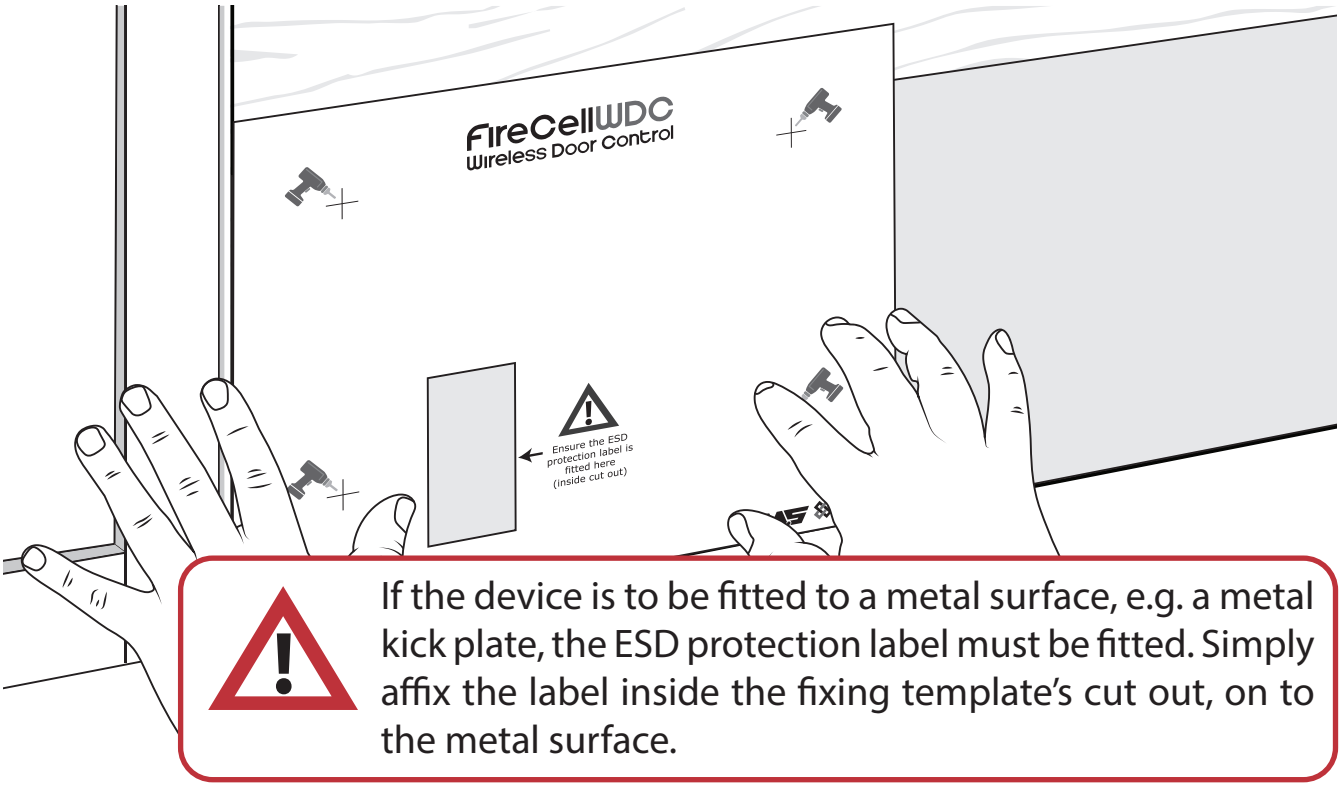
Newly added devices must now be assigned to the system.

From front display → **Assign Device** → **Assign All**

Dev 000 of 001 *Changing to* **Dev 001 of 001** *Once complete*

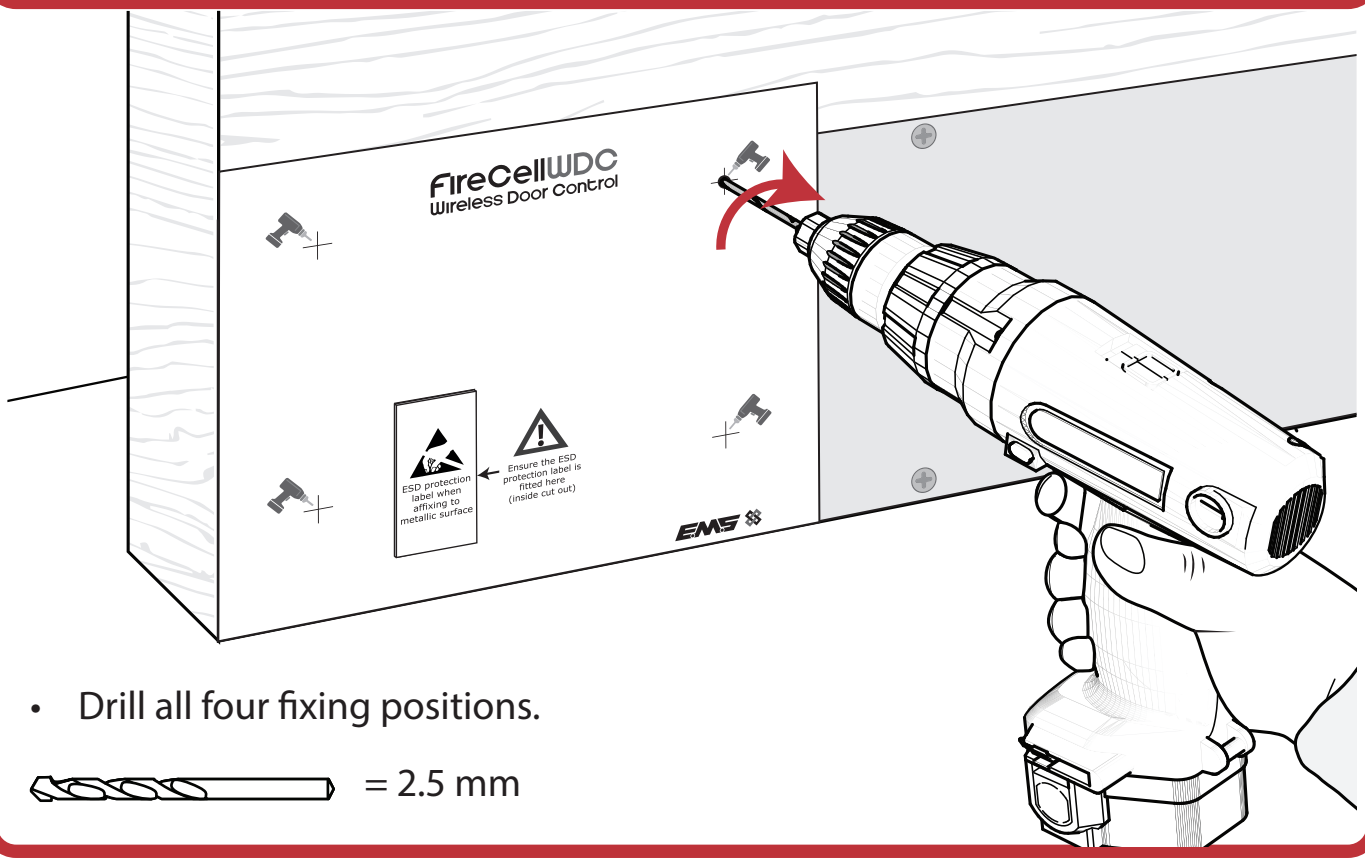
The device must also be added and configured on the control panel. Refer to the FireCell Programming Manual (MK98) for details.

Position template against door



If the device is to be fitted to a metal surface, e.g. a metal kick plate, the ESD protection label must be fitted. Simply affix the label inside the fixing template's cut out, on to the metal surface.

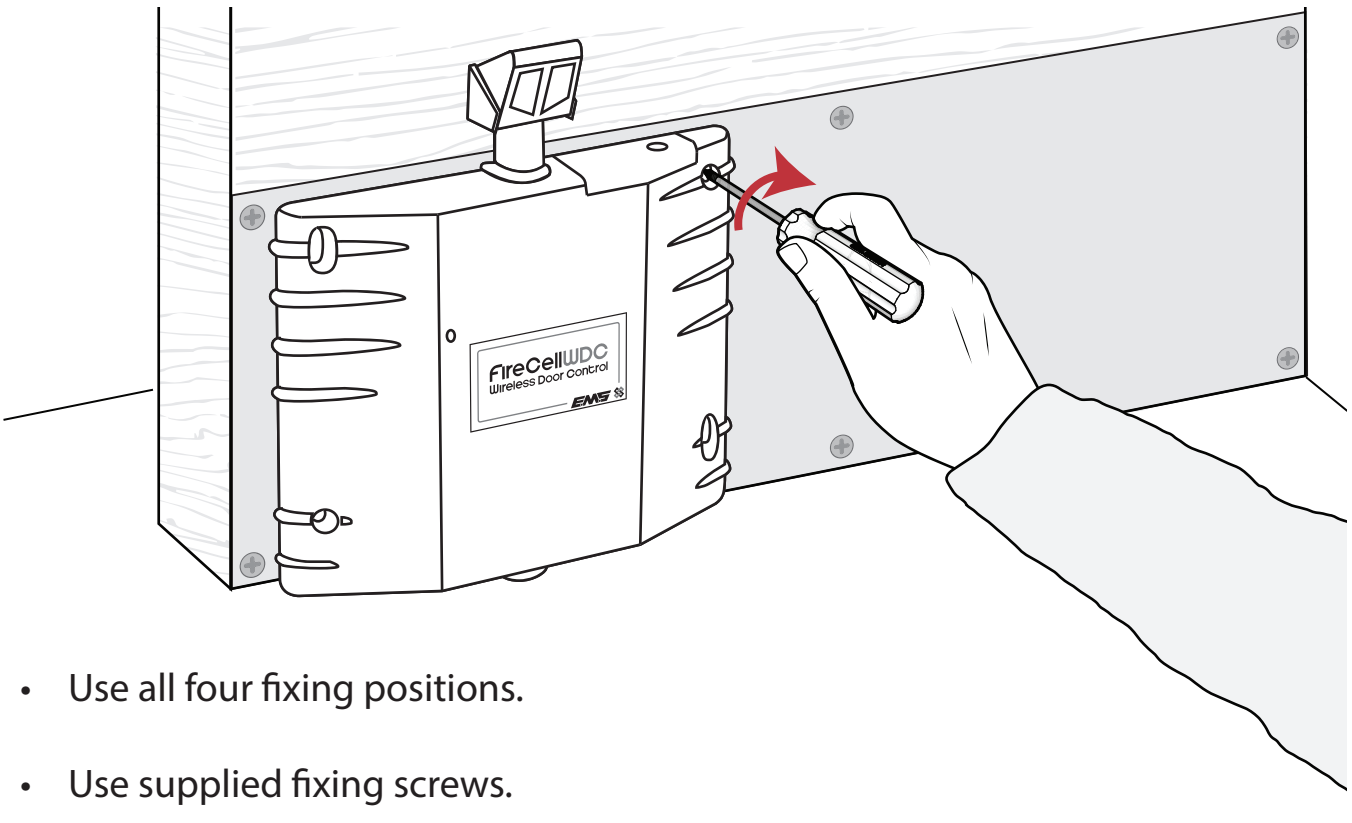
Drill fixing positions



- Drill all four fixing positions.

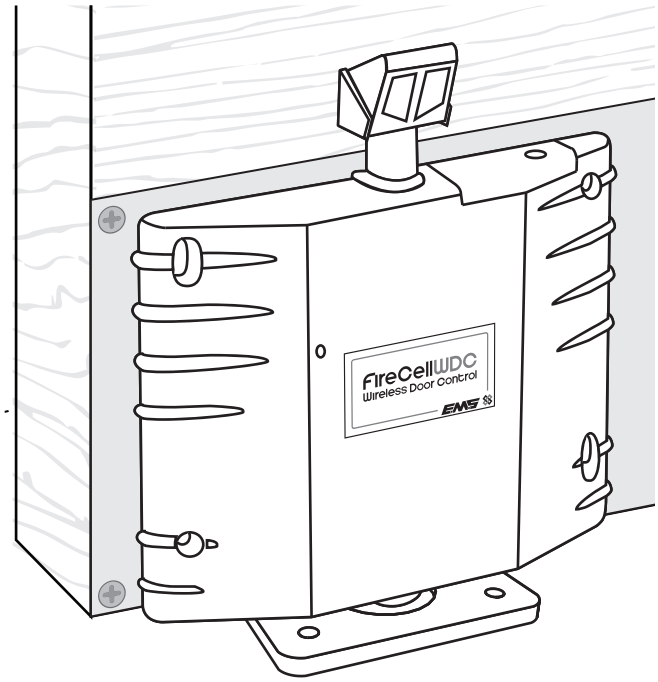
 = 2.5 mm

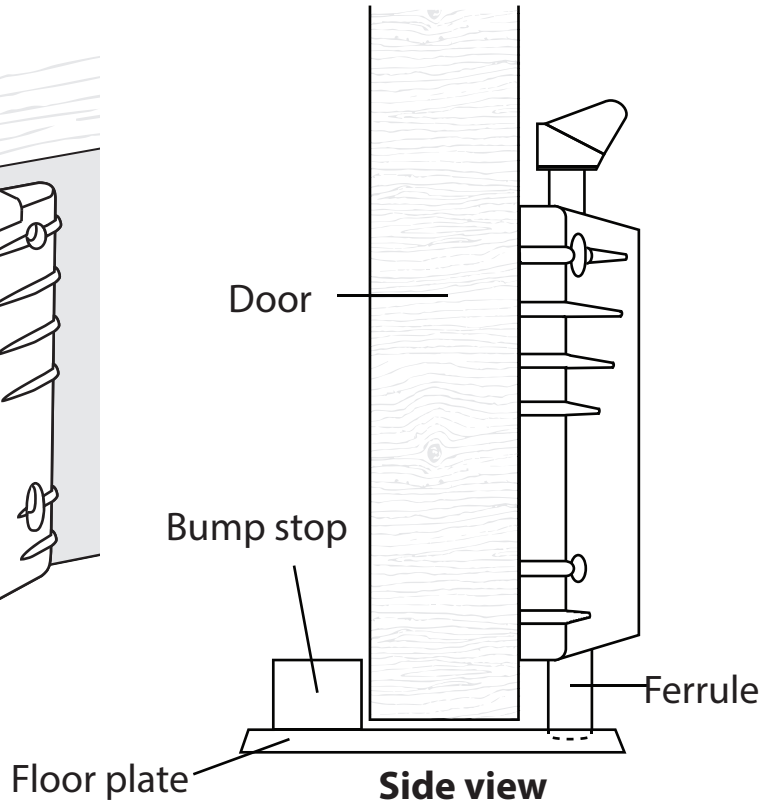
Fix unit to door



- Use all four fixing positions.
- Use supplied fixing screws.

Position floor plate

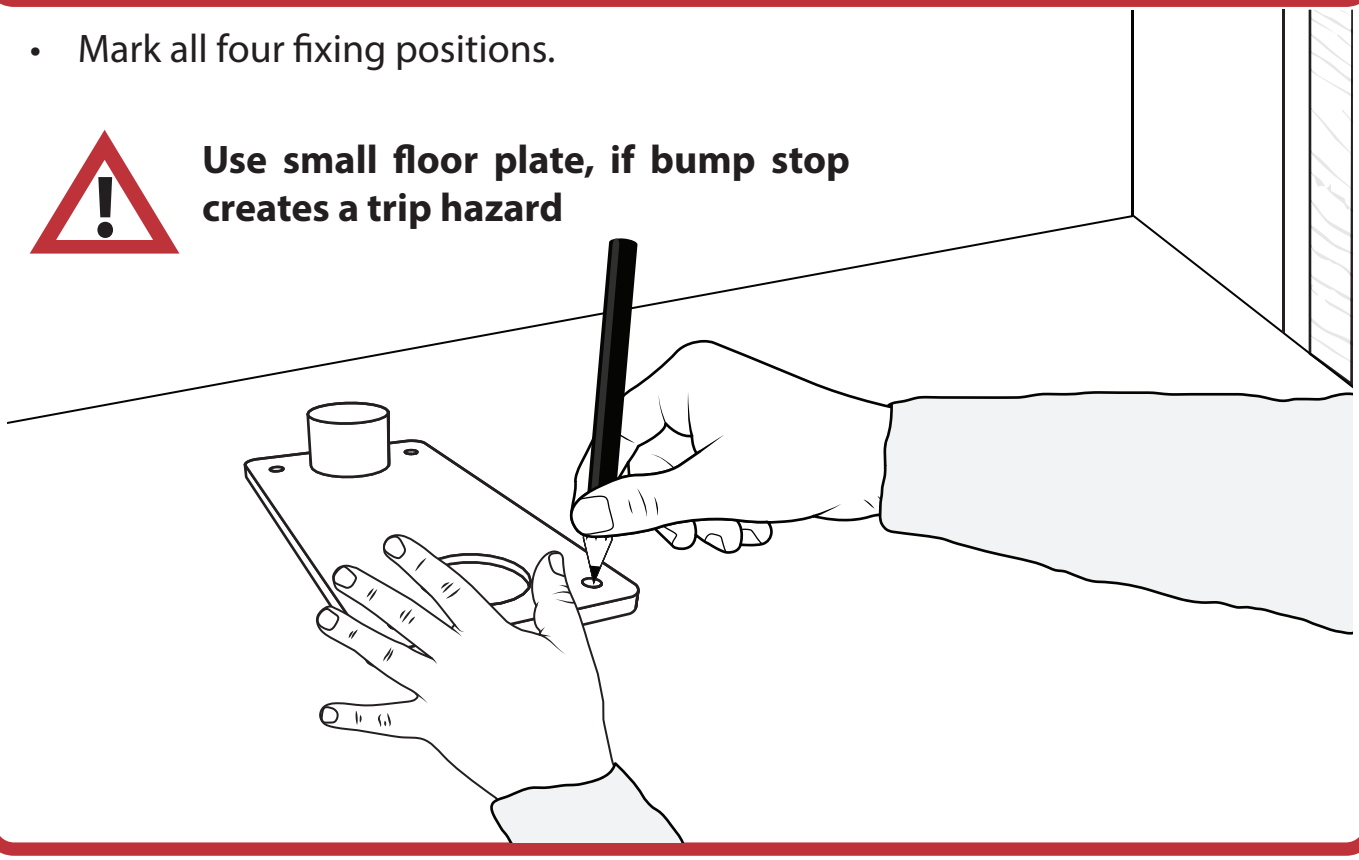




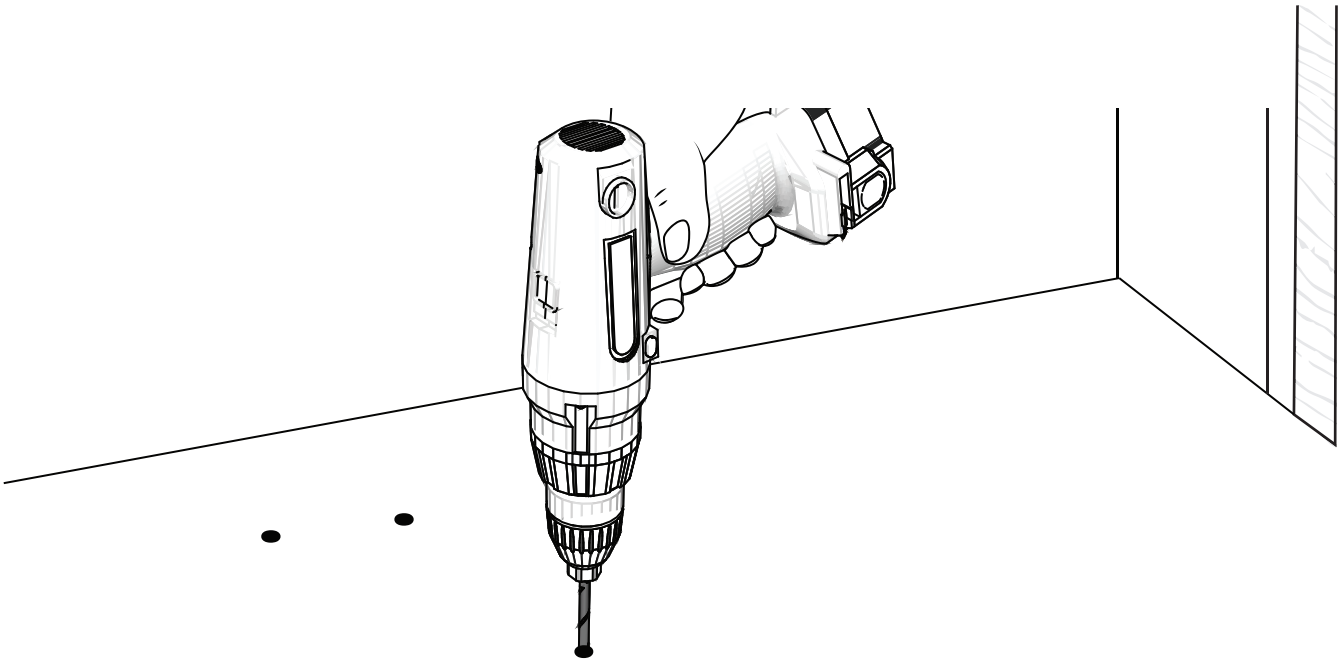
Mark floor plate fixing positions

- Mark all four fixing positions.

Use small floor plate, if bump stop creates a trip hazard



Drill floor plate fixing positions

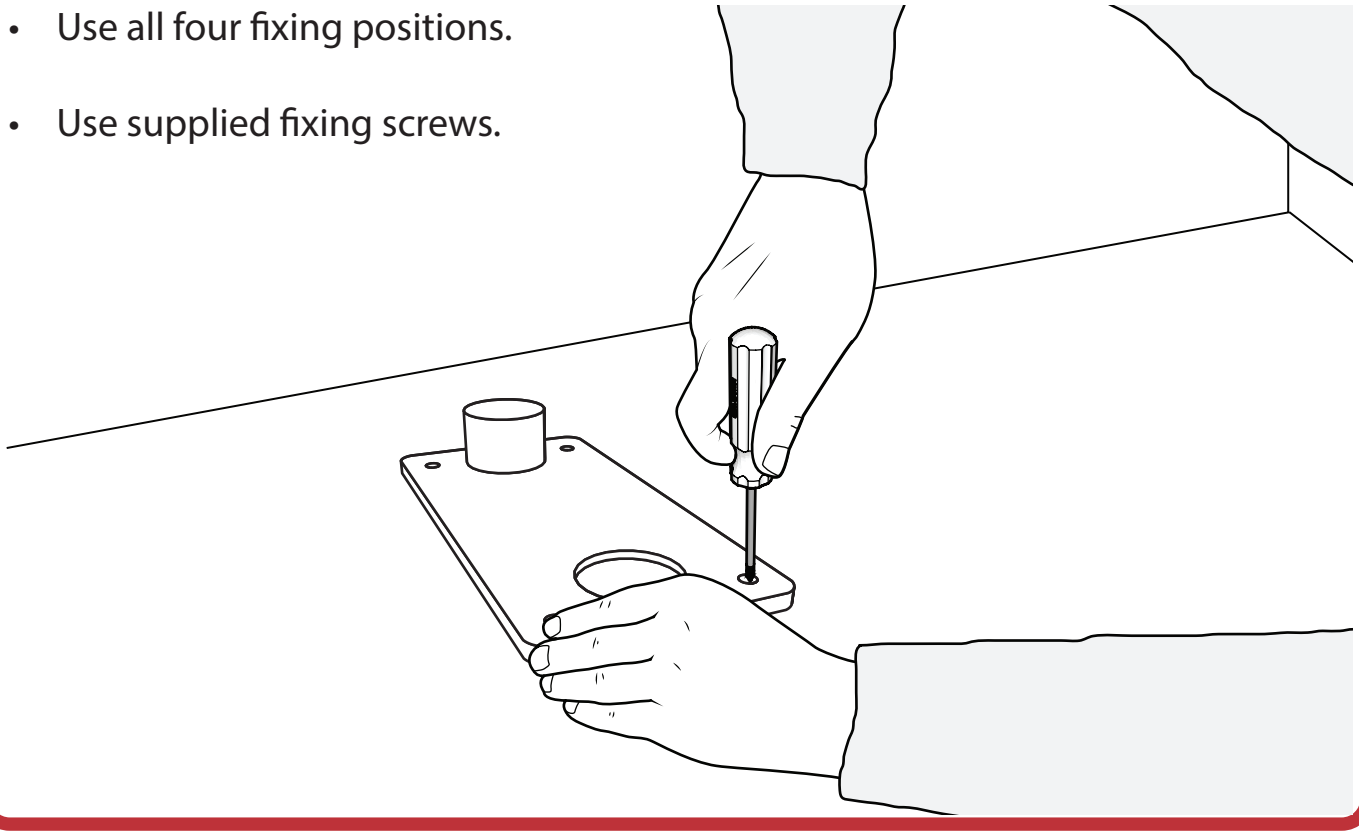


= 6 mm

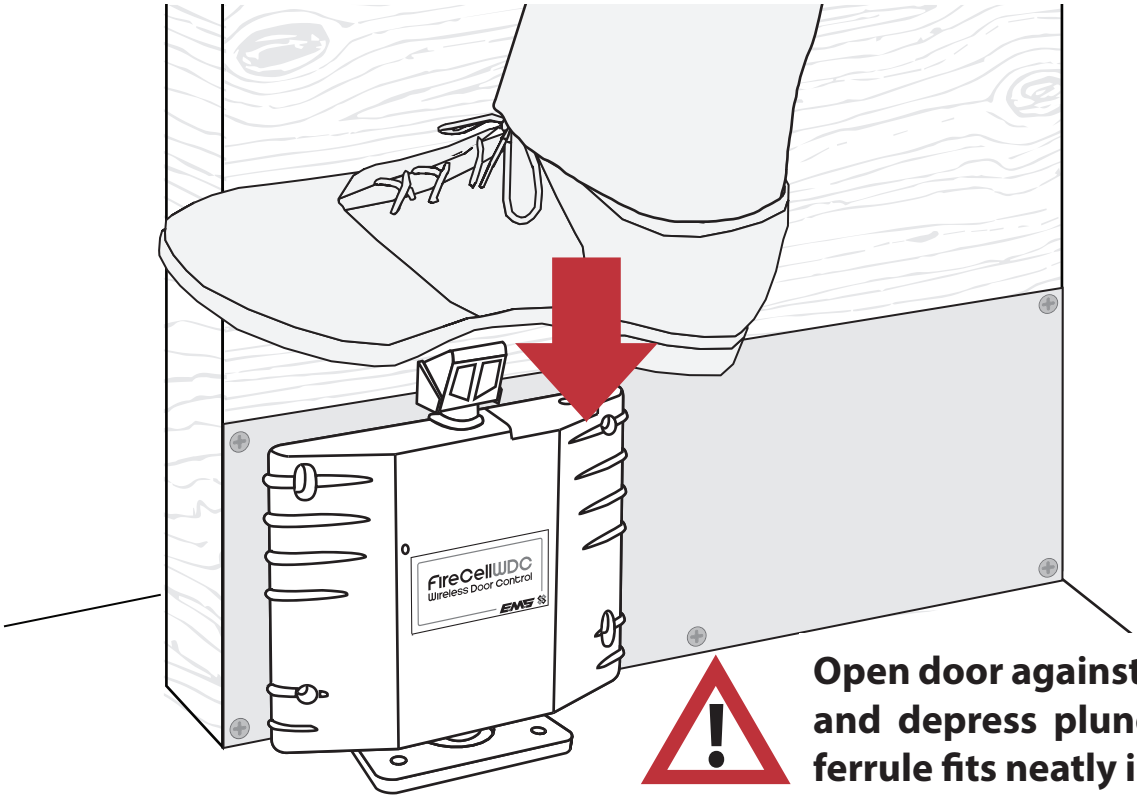
Before drilling, check locations of water pipes, gas pipes & electrical cables

Fix floor plate to floor

- Use all four fixing positions.
- Use supplied fixing screws.



Open fire door & depress plunger

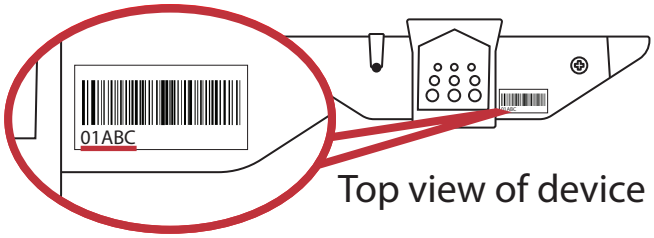


Open door against bump stop and depress plunger - check ferrule fits neatly into recess

Post installation configuration

Skip this step if the device has already been configured to the system

Ensure the device's ident number has been noted. The device's ident is located at the top of the device as shown:



Top view of device

To add devices by ident (post installation);

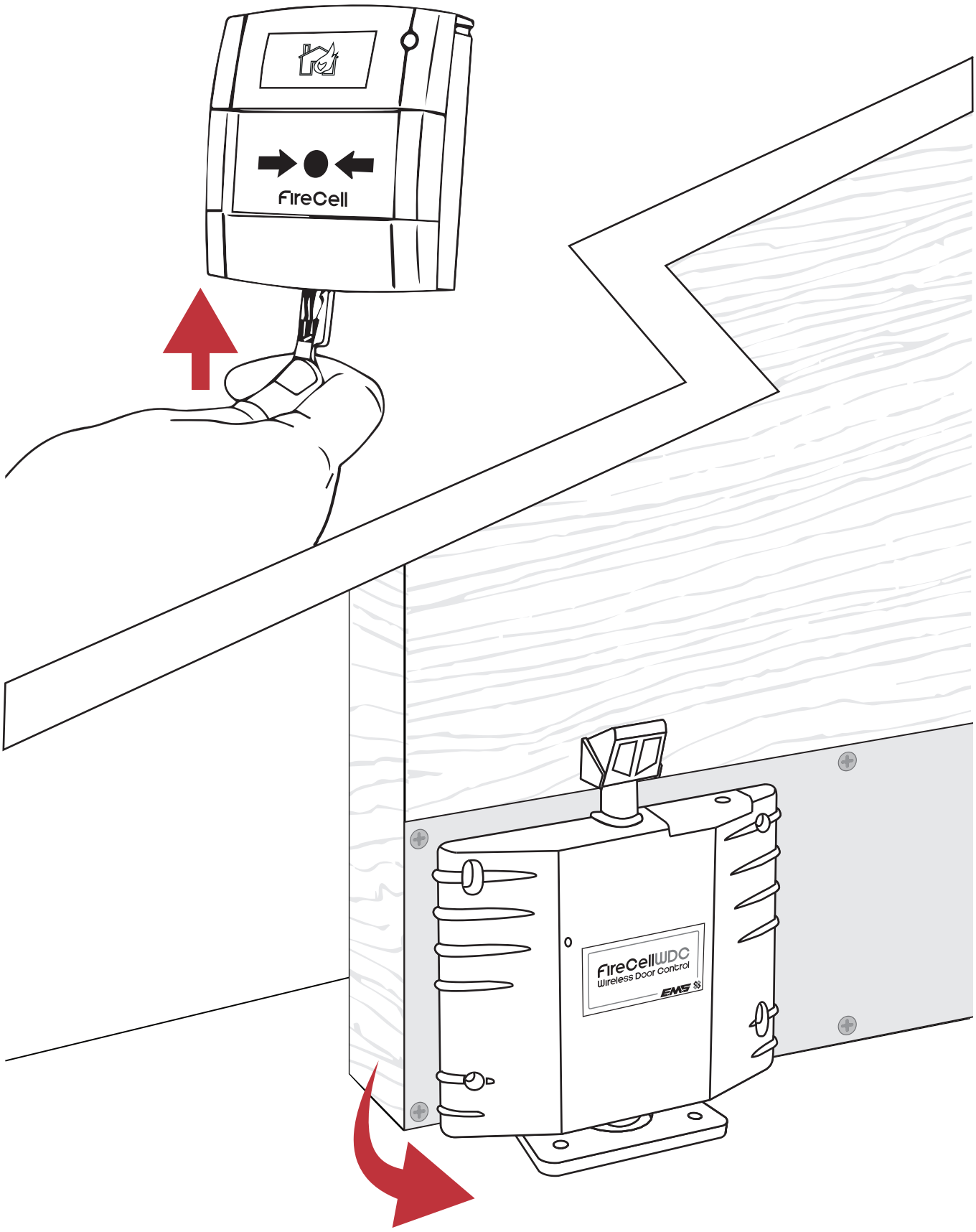
From front display → **Add New Device** → *Select RCC number* → *Select loop number* →

Select device address number → **Add By Ident** → *Enter device's ident* →

Enter device type → *Device is now logged on* → BACK *To exit*

The device must now be assigned to the system. *Refer to the ' Assign Devices' section on page 6 for details.*

Test device



Troubleshooting

In the rare event of an issue with the device's operation, refer to the points below:

Device not releasing upon a fire alarm condition?

- Check that the device is added correctly to the system and that it is fault free at the FireCell radio hub.
- Check that the door closes freely when closed manually.
- Check that the plunger has a minimum of 10 mm clearance between the ferrule and the floor / floor plate.
- Check that the WDC's output properties are set correctly within the control panel programming.

Why does the fire door not close freely?

- Check that the ferrule is not worn or damaged. Replace as necessary.
- Check that the plunger has a minimum of 10 mm clearance between the ferrule and the floor / floor plate.

Device not holding the door in an open position

- Check that the plunger is depressed fully.
- Check that the device is added correctly to the system and fault free at the FireCell radio hub.
- Check that the device is positioned low enough for a good connection between the ferrule and the floor plate. The optimum plunger movement is 10 - 15 mm.

Device in tamper fault?

- Check that the device is fixed correctly to the door.
- Check that the surface is flat and that the tamper switch is engaging correctly, when the device is fixed to the door.

Battery fault / device not powered?

- Check the polarity and the voltage of the batteries.
- Check that the battery cover is fitted correctly.
- DO NOT press the log on button on a pre-programmed device, as this will cause communication with the control panel to be lost. Should this happen, delete the device from the system and add it back on.

Device tone and flash indication

In addition to fault reporting at the control panel, the FireCell WDC has various beep and flash sequences to indicate a number of conditions.

During device startup sequence / motor operation

Beep sequence	Flash sequence	Indicative meaning	Action required
Low-Low-Low	None	Start-up complete	None
High-High-Low *(repeated until resolved)*	Red-Red *(on first two beeps only)*	Motor fault*	Remove and re-insert batteries
High-High-High-High-Low-Low-Low-Low	Red-Red-Red-Red *(on first four beeps only)*	Internal fault *(non-serviceable part)*	Remove and re-insert batteries *(If fault persists, return to manufacturer)*
None	Red-Green	Battery pack 1 low / incorrectly inserted (2x C batteries)	Replace / remove and re-insert batteries *(as appropriate)*

During standard operation

Beep sequence	Flash sequence	Indicative meaning	Action required
Low-Low-High *(repeated until the plunger releases)*	Red *(on low beeps only)*	Plunger fault	Check for obstructions to the plunger
High-Low-Low-Low *(repeated until resolved)*	Red *(on first sequence only)*	Internal fault *(non-serviceable part)*	Remove and re-insert batteries *(If fault persists, return to manufacturer)*
High-Low *(seven times, then door releases)*	Red *(on first beep in sequence only)*	Door is about to close†	Move away from the doorway

* Additional notification will be reported at the control panel as an analogue value 4 fault - Tamper/ Input Fault *(short or open circuit)*.

† Door closing can be as a result of many factors such as a fire condition, a loss of communication or a battery critical condition. Refer to the control panel for details.

Specification

Operating temperature	-10 to +55 °C
Storage temperature	5 to 30 °C
Humidity	Up to 95% non-condensing
Supply	2x C alkaline *(Panasonic LR14AD Powerline / Varta 4014 Industrial)*

CAUTION!

- This is a life safety product. Only use manufacturer approved battery types. Failure to do so may result in damage to the product.
- DO NOT mix batteries of different type or age.
- When replacing batteries; remove all old batteries before fitting replacements.

Supply voltage	2.22 to 3.3 VDC
Current consumption	60 µA
Operating frequency	868 MHz
Output transmitter power	Auto adjusting 0 to 14 dBm *(0 to 25 mW)*
Signalling protocol	X
Dimensions *(W x H x D)*	195 x 205 x 45 mm
Weight	0.5 kg
Location	Type A: For indoor use
Max. hold open power size	7
Max. door leaf width	1600 mm
Max. test door mass	160 kg
Max. overload test drop weight	36 kg
Max. test door friction	0.8 Nm
Min. angle between door open and closed positions	66 °

Note: FireCell WDC is not for use on metal doors.

Regulatory information

Manufacturer

KGS Manufacturing Poland Sp. z o.o.
Ul. Kolejowa 24. 39-100 Ropczyce, Poland

Certification

CE 19 0905 UKCA 24 0359

DoP number

0359-CPR-00648

Approved to

BS EN1155:1997. Incorporating Amendment No. 1 and Corrigendum Nos. 1, 2 and 3.

BS 7273-4:2007. Code of practice for the operation of fire protection measures – Part 4: Actuation of release mechanisms for doors. *(Category B)*

EN54-25:2008. Incorporating corrigenda September 2010 and March 2012. Fire detection and fire alarm systems. Part 25: Components using radio links.

European Union directives

EMS declares that this device is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address:
www.emsgroup.co.uk

2012/19/EU *(WEEE directive)*:
Products marked with this symbol cannot be disposed of as unsorted municipal waste in the European Union. For proper recycling, return this product to your local supplier upon purchase of equivalent new equipment, or dispose of it at designated collection points. For more information see:
www.recyclethis.info

Dispose of your batteries in an environmentally friendly manner according to your local regulations.

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