



Fitting and Operating Guide

plus

Maintenance Test Record



This is an important document detailing the correct installation, maintenance and usage of the Dorgard device.

These instructions must be read and fully understood before you start installation.

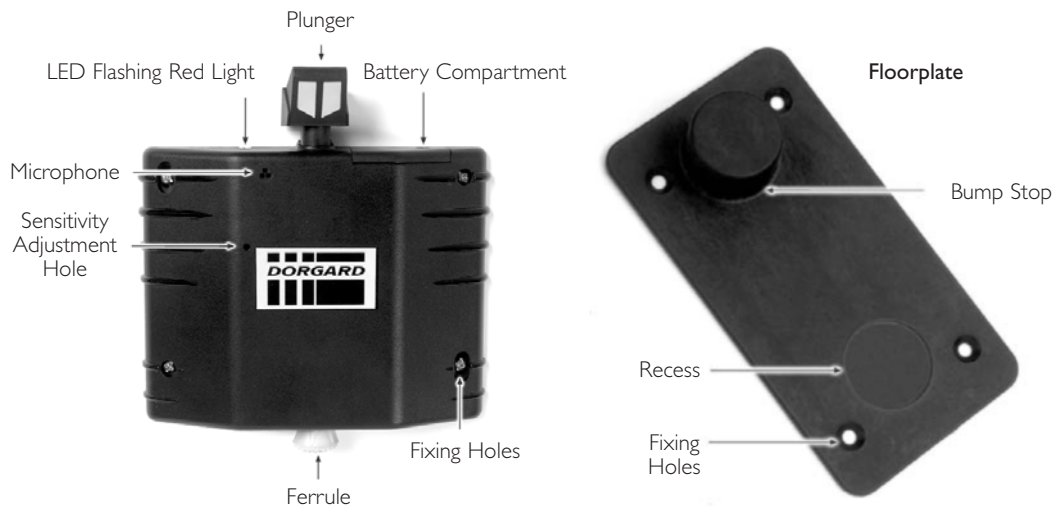
This guide must be kept in a safe place such as your Fire Risk Assessment File.

Manufacturer's Classification
As required by BSEN 1155:1997

| | | | | | |
|---|---|---|---|---|---|
| 3 | 5 | 7 | 1 | 1 | 3 |
|---|---|---|---|---|---|

Keep this guide in a safe place.

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Introduction

Dorgard is a device designed to hold open a fire door safely, automatically releasing upon the sound of a fire alarm. It can be used to hold the door in any position between open or closed.

IMPORTANT:

Dorgard must be used only for the purpose for which it is designed. It is not suitable for external use. Read this guide and follow the instructions carefully. Keep this guide in a safe place eg: Your Fire Risk Assessment File, for future reference.

Prior to installing Dorgard and the Floorplate

Ensure:

- 1) The fire door is self-closing ie: has a door closer fitted.
- 2) The fire door closes tightly against the door jamb.
- 3) Where Dorgard is to be fitted, the door surface is perfectly smooth and flat.
- 4) You have determined the closing force of the door closer (see note below).
- 5) The fire alarm system is working correctly, ie: the sounders work when activated.
- 6) Dorgard forms part of your Fire Risk Assessment (as required by the Fire Precautions [Workplace] Regulations 1997).

Fire doors weighing more than 120kg, which have a closing force in excess of 120 Newton Metres (that's a closing force of about 15kg, 800mm from the hinge) must have the Floorplate installed in combination with the Dorgard unit. Dorgard can hold a fire door open safely without the Floorplate installation if the fire door's weight and closing force are less than those listed above.

When Dorgard is holding a fire door open it listens for the continuous sound of a fire alarm. It needs to hear a fire alarm that exceeds 65dB (sound level) for longer than 14 seconds. At a general noise level of 80dB (Sound level) Dorgard will release. This facility has been built into the unit as a safety feature. Should the noise level in your premises exceed 80dB it is unlikely that you would hear a 65dB alarm.

Supplementary information about the sound of a fire alarm:

The British Standard for fire alarm installation, BS5839-1:2002, (Clause 16.2).

The sound pressure level of alarm signals should be generally, throughout all accessible areas of the building not less than 65dB(A) . . . where the sound pressure level of background noise is greater than 60dB(A), the sound pressure level of the fire alarm signal should be 5dB above the sound pressure level of the background noise.

It also states:

The sound pressure level of alarm signals should be not less than 75dB(A) at the bedhead within rooms in which the fire alarm system is intended to raise people from sleep.

It is understood that there are some noises in everyday life that may be louder than a fire alarm and persist for longer than 30 seconds, notably a vacuum cleaner. Although required in the British Standard, it is often found that the alarm is not 5dB (A) louder.

Installation Tips

Dorgard can be mounted temporarily to the door with Blu-Tack. You can then move the unit up/down left/right to the best position for permanent mounting.

Enter the Serial No: - (Found on back of Dorgard Unit) into the Maintenance Record at the back of this guide prior to installation.

Tools Required to:

Fit Dorgard:

A screwdriver (either a Phillips / Pozidrive size No. 2 or a flat blade, parallel tip, 6.5mm wide). A bradawl (a sharp pointed tool for making holes in wood). A 3mm drill bit and electric drill may be needed if a kickplate is fitted onto door.

Fit Floorplate:

A pencil, a 6 mm masonry drill bit (for concrete floors), an electric drill and a Phillips screwdriver (Pozidrive size No. 2).

Automatic Night Time Release

During normal operation Dorgard can be used to hold fire doors open 24 hours a day. It is however recommended that fire doors are closed at night, as most buildings are unoccupied during these hours. The chance of a fire spreading undetected is therefore higher than during daylight operations. Should you decide that your fire doors should be closed at night, Dorgard can be selected to release at a pre-set time. Dorgard will release at this pre-set time and then will not operate as an hold open device until a pre-set time the following morning.

To use this function Dorgard's internal time clock should be set to 12.00 noon, and dip switch selection should be made prior to installation. The dip switches can be found on the back of unit. For normal operation the dip switches should be left in the Off position. Use the small screwdriver enclosed to select any required dip switch to the On position, activating the Automatic Night Release option.

The available Night time release options are:

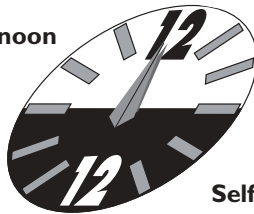
(Dorgard Internal Clock set to 12.00 noon)

| | |
|------------------|---|
| Dip switch 1 | ON = Release at 20:00 hrs – Operational 08:00 hrs |
| Dip switch 2 | ON = Release at 21:00 hrs – Operational 07:00 hrs |
| Dip switch 1 & 2 | ON = Release at 22:00 hrs – Operational 06:00 hrs |
| Dip switch 3 | ON = Disable Night time release warning tone (See Important Note page 3) |
| Dip switch 4 | No function available |

Automatic Night Time Release *continued*

To set Dorgard's internal clock to 12.00 noon the Dorgard must be powered up at 12.00 noon. It will then operate at the times indicated opposite. Dorgard does not take into account winter or summer time and therefore does not adjust automatically for daylight savings. To reset Dorgard's internal clock, remove the batteries, wait 10 seconds and re-insert them at 12.00 noon.

Install batteries at noon



Self tests automatically at midnight

Dorgard carries out a self-test every 7 days checking for any possible problems or defects, should it detect any faults it will emit a beep pattern and Fail to Safe (refer to common error messages).

Important Note: It is recommended that the warning tone is NOT disabled. The warning tone is to alert persons using the building that the door is about to close and is a safety feature. It is recognised however, that in some locations the warning tone at night may cause a disturbance. It is for this reason alone that the provision of disabling the night time tone has been made.

After installing the batteries Dorgard sounds a long tone, followed by a motor sound (Dorgard setting), then 3 x single tones. These 3 tones indicate the dip switch selection, Low tone = Off, High tone = On. For example: the dip switches are selected; No:1 = On, No:2 = Off, No:3 = Off. The tones will then sound High, Low, Low.

Batteries-Alkaline Only **(Do Not Use Rechargeable Batteries)**

The 2 x C Size Procell Alkaline batteries supplied should last for at least 12 months. Dorgard continually checks the battery life ensuring safe operation.

Insert the batteries into the battery compartment (+) positive side facing up. Inserting the batteries the wrong way could cause internal damage. When closing the battery compartment use a Phillips / Pozidrive No.2 screwdriver, taking care not to over tighten.

When the batteries require changing Dorgard will Fail to Safe (no longer work as a hold open device). A warning beep will sound until the batteries are exhausted, removed or replaced with new ones. Battery life may be reduced in noisy environments!

Installation of Dorgard DGI328-A01

Follow Illustrations Fig 2.1 - 2.6 below.

- 1) Close the fire door. Place the template provided against the door on the side that shuts against the door frame. Ensure the template matches your view of the door. **(Fig 2.1)**
- 2) Please make allowance for differing floor surfaces. **(See note: Page 5)**
- 3) Make pilot holes or mark the position for the holes through the template. **(Fig 2.2)**
- 4) If you want to utilize the Night time release function, select the relevant dip switch/s to the On position. **(Fig 2.3)**
- 5) Using 2 of the 4 screws supplied fix Dorgard to your fire door; at points A and B on fitting template. This will allow Dorgard to be moved up and down slightly for correct positioning. When Dorgard is in the correct position fasten down all 4 screws. **(Fig 2.4)**
- 6) Open battery compartment using a Phillips / Pozidrive No.2 Screwdriver. Insert the batteries supplied (+) positive side up. Close the battery compartment by tightening the screw down firmly (Do not over tighten as this will damage the battery lid). **(Fig 2.5)**
- 7) The Dorgard will beep and the LED will flash several times.
- 8) Affix fire door sticker supplied at eye level on the same side as the Dorgard. **(Fig 2.6)**

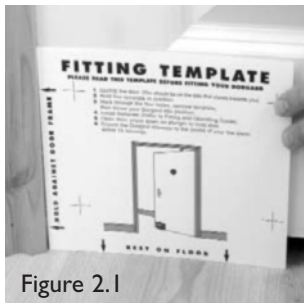


Figure 2.1

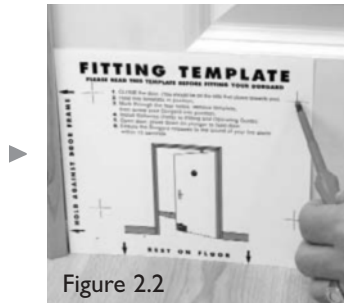


Figure 2.2

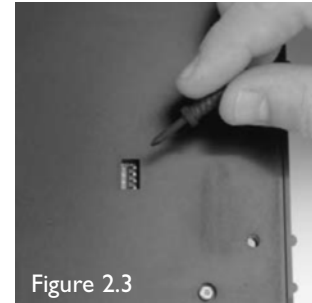


Figure 2.3

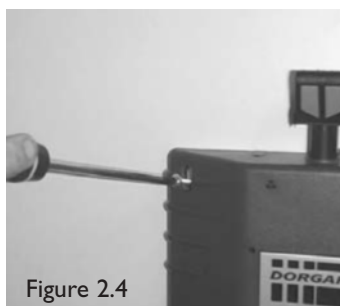


Figure 2.4

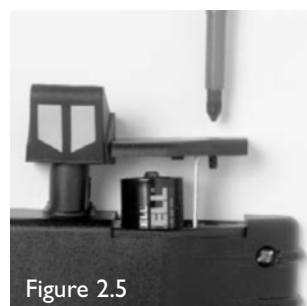


Figure 2.5

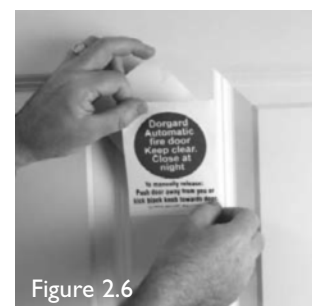


Figure 2.6

Installation of Floorplate DGI328-FP

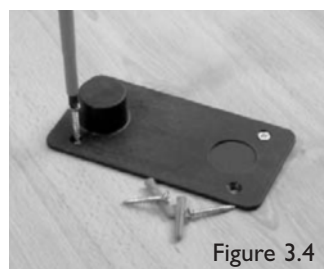
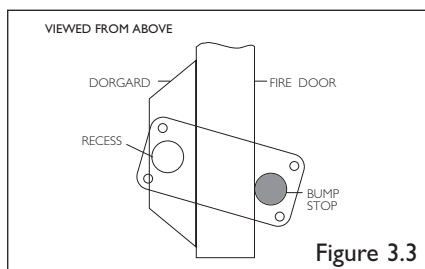
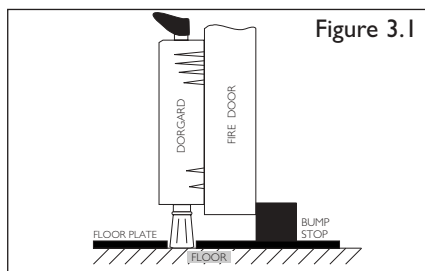
If required, follow Illustrations Fig 3.1 - 3.4 below, if not move onto page 6.

- 1) Open the fire door, slip the floorplate under the fire door. The bump stop should be positioned behind the door. **(Fig 3.1)**
- 2) Depress the plunger on Dorgard so that the ferrule sits in the recess in the floorplate. **(Fig 3.2)**
- 3) Position the floorplate so that the bump stop is against the rear of the door and the ferrule is centred in the recess of the floorplate. **(Fig 3.3)**
- 4) Mark position of floorplate on to the floor surface.
- 5) Remove the floorplate.

Warning! Before drilling holes or fastening screws into the floor, check the location of water pipes, electrical points, gas pipes etc. Failure to do so could cause disruption to the building's services and may result in serious injury or death!

- 6) If floor is concrete, drill 4 x 6mm holes (approximately 40 mm deep) at the positions marked and insert the masonry plugs supplied.
- 7) Position the plate over the masonry plugs or marked points and fasten the floorplate to the floor using the screws supplied. **(Fig 3.4)**
- 8) Open the fire door against the bump stop and press down the plunger. If you have positioned the floorplate correctly the rubber ferrule should fit neatly into the recess of the floorplate. If not go back to step 3 and reposition the floorplate.

Note: The floorplate prevents the door slipping closed. Floor movement may also cause Dorgard to slip (eg: a wooden floor may give slightly under a person's weight as they walk past the door).



Operating Dorgard

Follow Illustrations Fig 4.1 - 4.4 below.

To hold the door open

- 1) Open the door to the required position. (Fig 4.1)
- 2) Stand sideways to the door: (Fig 4.2)
- 3) Press the black knob down using your foot. Greater foot pressure may be needed depending upon the force from the door closer or the type of floor surface.
- 4) Whilst depressing the black knob, pull the door **gently** in the direction of closing. (Fig 4.3)
- 5) Remove your foot and let go of the door:

To release Dorgard

- a) Lightly kick the black knob toward the door. (Fig 4.4)
- b) Push the door in the direction of opening.

Note: If the door has been pushed hard against the floorplate, bump stop or a wall, then Dorgard will only release by method a).



Important

Testing Dorgard to the Fire Alarm

- 1) Open fire door and depress the plunger activating Dorgard. If the plunger is up Dorgard will not hear the alarm.
- 2) Sound the fire alarm for a minimum of 30 seconds.
- 3) The LED on top of the Dorgard will flash every second to show it is hearing your fire alarm.
- 4) Dorgard will release the door in approx. 20 seconds.
- 5) Should Dorgard not respond to your fire alarm, it may be that your alarm is too quiet. Dorgard needs to be adjusted to compensate. (Refer to page 8.)
- 6) When Dorgard is ready to release the door, a warning tone will be sounded. After Dorgard has released the fire door, it will take 10 seconds to reset, ready to be re-activated.
- 7) Dorgard self tests every 7 days. During the self-test, if the fire door is held open, Dorgard will release the door. Should Dorgard detect an internal fault it will sound a warning tone. (Refer to common error messages page 10.)

Note: Alterations to the premises ie: new furniture, new carpets etc, may alter the audibility of the fire alarm. Following alterations a fire alarm test must be carried out to ensure that Dorgard responds. If it fails to respond to the alarm refer to Adjusting the Dorgard unit on page 8. Despite Dorgard self-testing every 7 days, weekly bell tests are highly recommended. This will ensure that Dorgard is responding to the fire alarm.

Figure 4.3



Figure 4.4



Adjusting the Dorgard Unit

Each environment will vary and Dorgard may need adjusting to suit your individual environment. On identifying a necessary adjustment use the small plastic screwdriver provided. Take care not to over-adjust as this will render the unit inoperative.

Adjusting the sensitivity of Dorgard

If Dorgard is not sensitive enough (ie: won't respond to alarm)

- 1) Carefully insert the adjustment screwdriver into the adjustment hole on the front of the unit.
- 2) Turn screw clockwise through no more than 5 degrees (a small adjustment with the screwdriver is equivalent to a large alteration in the sensitivity).
- 3) Sound fire alarm for a minimum of 30 seconds and ensure that Dorgard releases to the fire alarm. The LED will flash once a second if it hears the fire alarm.
- 4) If the problem still persists repeat steps 1-3.

Note: The adjustment screw is limited in both directions, once you can feel resistance against turning – stop to avoid damaging the unit. If Dorgard still fails to respond to alarm, consider points in Trouble shooting section. If further assistance is required see contact details on back cover.

If Dorgard is too sensitive (ie: releases to no apparent sound)

Follow Steps 1-4 above, but turn screw anti-clockwise in Step 2.

Trouble shooting

The following are the most frequently asked questions regarding Dorgard, with a quick checklist to follow.

1) Dorgard is not releasing to Fire Alarm

- Check fire alarm sounds for at least 30 seconds.
- Check door is free to close unhindered.
- Check that the plunger has a minimum of 10mm of down travel before the ferrule contacts the floor.
- Check the fire alarm is louder than 65dB where Dorgard is situated.
- Calibrate unit if required (see page 8 Adjusting Sensitivity of Dorgard).

2) Dorgard releases to no apparent sound

- As a safety feature, Dorgard has to release to any sound that it hears as being continuous and louder than 65dB as this sound could be obscuring a potential fire alarm.
- Check that Dorgard is on the side of the door that closes into the door frame.
- Dorgard will release if the door is pushed in the direction of opening (see section on Operating Dorgard). To prevent this happening fit the floorplate supplied.
- Dorgard will release every 7 days as part of its self-testing routine.
- Calibrate unit if required (see page 8 Adjusting Sensitivity of Dorgard).

3) Door creeps closed with plunger fully depressed

- Check that the ferrule is not worn or damaged. Replace if necessary.
- Check that Dorgard is positioned low enough that the ferrule makes good contact with the floor when the plunger is depressed. A vertical plunger movement of 10 - 15mm is ideal. Re-position as necessary or fit floorplate supplied.
- Check that the overhead door closer does not shut the door with excessive force. If so, fit the floorplate supplied or loosen pressure on overhead closer.
- Check that the ferrule has enough purchase on the floor surface ie: floor surface is not too slippery. If so, fit the floorplate supplied.

4) Dorgard does not retain the door in an open position

- Check that the plunger is depressed while standing side on (see page 6 Operating Dorgard).
- Check that the battery compartment is closed and that the batteries are effective.
- Check that Dorgard is not fitted too low on the door. A vertical plunger movement of 10 - 15mm is ideal for the plunger to lock down properly.
- Check that Dorgard is mounted on the side of the door that closes into the door frame.

- **If all the above points are satisfied and further assistance is required see contact details on back cover.**

Common Error Messages

During normal operation Dorgard is continually monitoring all functions. If at any time it detects a possible fault or maintenance issue it will Fail to Safe (no longer operate as a hold open device). It will emit a series of beeps to communicate action is required. The following Common Error Messages chart should be used to identify error and action required. Please follow these instructions. Should your problems persist please see contact details on back cover.

| Beep / Flash Sequence | What it means | What to do |
|--|---|--|
| During Power up | | |
| LoHi-LoHi-LoHi | Indicates battery lift is open during power up | No action required |
| Long Tone | Indicates start of power up test | No action required |
| Lo – Lo – Lo | No dip switch has been selected | No action required |
| Hi – Lo – Lo | Dip switch 1 has been selected | No action required |
| Lo – Hi – Lo | Dip switch 2 has been selected | No action required |
| Hi – Hi – Lo | Dip switches 1 and 2 have been selected | No action required |
| Lo – Lo – Hi | Dip switch 3 has been selected | No action required |
| Hi – Lo – Hi | Dip switches 1 and 3 have been selected | No action required |
| Lo – Hi – Hi | Dip switches 2 and 3 have been selected | No action required |
| Hi – Hi – Hi | Dip switches 1, 2 and 3 have been selected | No action required |
| | Dip switch 4 has no function and will not affect beep sequence | |
| During standard operation | | |
| *----(32secs)----*----(32secs)----*----(32secs)----*----etc. | LED indicates that the system is working properly | No action required |
| *-(1.3secs)*-(1.3secs)*-(1.3secs)*-(1.3secs)*-etc | LED indicates that the Dorgard is hearing a possible alarm (or a continuous background noise in excess of 65dB) | If no alarm is sounding please refer to the section on adjusting the sensitivity of Dorgard. |
| HiLo – HiLo – HiLo – HiLo – HiLo – HiLo – HiLo – HiLo *-----*-----*-----*-----*-----*-----*-----* | Dorgard is about to release door (If warning tone has been disabled – then no tone will sound) | No action required |

Common Error Messages *continued*

| Beep / Flash Sequence | What it means | What to do |
|--|---|--|
| During standard operation | | |
| LoHi – LoHi – LoHi – LoHi – LoHi – LoHi –LoHi – LoHi *-----*-----*-----*-----*-----*-----*-----* Tone and flash sequence is followed by the sound of the motor driving | Dorgard resetting ready for re-activation | No action required |
| Error Modes | | |
| Lo – (2secs) – Lo – (2secs) – Lo – (2secs) – etc *-----*-----*-----*-----*-----etc | Indicates battery lift is not screwed down properly | 1) Screw down battery lift |
| HiHiLo..... * * * This pattern may repeat | Possible fault with motor | 1) Check ferrule is not worn or damaged. Replace if necessary 2) Release tension on fixing screws and check Dorgard is positioned flat against door with no obstructions 3) Recycle or if necessary, replace batteries |
| HiHiHiHiLoLoLoLo---(4secs)--- HiHiHiHiLoLoLoLo---(4secs)---etc | Indicates possible plunger movement fault | Same 3 points of action as above |
| HiLoLoLo---(4secs)---HiLoLoLo---(4secs)---etc * * * * -----(4secs)--- * * * * -----(4secs)--- etc | Indicates possible problem with battery insertion | Same 3 points of action as above |
| HiLo----- (17mins)-----HiLo----- (17mins)-----etc (Dorgard will repeat HiLo 8 times after 68mins) ****--(4secs)-- ****--(4secs)-- ****--(4secs)-- etc | Low battery mode or miscellaneous error | Same 3 points of action as above |

* LED flash

Maintenance Schedule

Preventative maintenance and regular testing will ensure that Dorgard is performing at its best at all times. Ensure you update the Maintenance Record!

Weekly

Check that the Dorgard plunger is pressed down and is holding the door open. Sound the fire alarm and within 4 seconds the red light on the top of the Dorgard should start flashing once every second. This indicates that the Dorgard is hearing the alarm. After the alarm has sounded for 20 seconds, the door should release to close. If the door does not release refer to the Trouble Shooting section (page 9).

Monthly

Carry out the weekly test and in addition dust the unit checking that the 3 holes for the microphone are open and clear of any dust, dirt etc. Dorgard should be cleaned with a slightly damp cloth. If fitted, check the floor plate is securely attached and has not been damaged.

6 Monthly

Carry out the weekly and monthly schedule and in addition, check:-

- 1) Under the unit for the condition of the ferrule.
- 2) The Dorgard unit is firmly attached to the door.

If any items are worn, torn or damaged then replace immediately. For further assistance see contact details on back cover.

Yearly

Carry out the 6 monthly schedule and replace the batteries.

Note and Warning

- The unit is designed to detect low battery power or possible faults, it will give a continual warning (sound a series of beeps) and will Fail to Safe (no longer operate as a hold open device).
- Noisy environments may reduce battery life. If this is the case then the replacement schedule should be altered accordingly.

Maintenance Record

This log sheet below is designed to cover a 12 month period and should be filled out after each test. This log is a formal record of the test and maintenance schedule carried out by a competent (responsible) person(s) throughout the history of the installation of the Dorgard unit. Further log books are available from the Dorgard Technical Advice Line.

| | |
|--|----------------------|
| Serial Number: Serial Number is on back of Dorgard unit. | Location: |
| Installation Date: | Installed by: |

Key to symbols: W = Weekly, M = Monthly, 6M = Six Monthly and Y = Yearly

| Test | Result | Date | Sign | Test | Result | Date | Sign |
|------|-------------|-----------------|------------|------|--------------------|------|------|
| W | <i>Pass</i> | <i>01/01/02</i> | <i>AJB</i> | W | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| M 1 | | | | M 7 | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| M 2 | | | | M 8 | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| M 3 | | | | M 9 | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| M 4 | | | | M 10 | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| M 5 | | | | M 11 | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| W | | | | W | | | |
| 6M | | | | Y | Battery change due | | |

Manufacturer's Warranty

Fireco Limited ("we" and "us") warrants to the customer ("you" and "your") that the product will be free from defects in material and workmanship for a period of 12 months from the date of purchase. If the product is defective whilst under warranty we will, at our option, repair the product or replace it free of charge.

If the product appears to develop a defect while under warranty please first check that the product is being correctly used in accordance with this operating guide and that the batteries are functioning. If this does not resolve the problem please contact us in writing at the e-mail address shown below or telephone the Dorgard Technical Advice Line.

The warranty does not apply to any defect in the product arising from fair wear and tear; wilful damage, accident, negligence by you or any third party, abnormal working conditions, failure to follow the instructions in this operating guide, misuse or alteration or repair of the product without our prior approval. The warranty does not cover batteries and ferrules which may need to be replaced within the period of the warranty. We will not be liable to you for any loss of profits, administrative inconvenience or indirect or consequential loss or damage arising out of any defect in the product.

Where the products are sold under a consumer transaction (as defined by the Consumer Transactions (Restrictions on Statements) Order 1976) your statutory rights are not affected by the terms of this warranty.



For Technical Assistance contact the UK Dorgard Technical Advice line on:
0870 8500084 or **+44 (0)1273 696007** or e-mail us at **help@dorgard.com**

For all other queries please contact your supplier.
An International Approved Suppliers list can be found on our website:
www.dorgard.com