## EMERGENCY LUMINAIRE TEST RECORD SHEET

LUMINAIRE TYPE/REF:\_

### DATE OF INSTALLATION:\_

#### LOCATION:\_

		1st Year		2nd Year		3rd Year		4th Year		5th Year	
Month	Test	Signed	Date								
1	Functional										
2	Functional										
3	Functional										
4	Functional										
5	Functional										
6	Functional										
7	Functional										
8	Functional										
9	Functional										
10	Functional										
11	Functional										
12	Three Hour										
	Functional										

#### **TECHNICAL INFORMATION**

Power Rating:	2200V/240V AC - 50/60Hz					
Colour Temp:	6500K					
Power Consumption:	Maintained 2.5W					
Lamp Type:	LED Non-replaceable					
Lumen Output	Maintained 170 lm Battery 110 lm					
LED Model & Qty:	2835 /14 Pieces					
Battery Life at 20°C:	> 4 years					
Class Type:	1					
Operating Temp Range: 0°C - 40°C						
Battery Type:	Li-FePO4 18650 / 3.2V / 1000mAh					
Battery Operating Temp Range:	0°C - 40°C					
Charge Time:	24 hours					
Knockouts:	20mm					
Product Dimensions:	276 x 110 x 60mm					
Product Weight:	426g					
Conforms To:	BS EN60598-2-22					
Built-in battery protectio	n					

GUARANTEE Your GreenBrook IP65 Bulkhead is guaranteed for 3 years from the date of purchase. This is in addition to your statutory rights.

NOTE: Product & Packaging Disposal When disposing of this item and its packaging please follow local regulations and use an appropriate waste disposal centre. See GreenBrook website for further details.

PLEASE KEEP THESE INSTRUCTIONS SAFE FOR FUTURE REFERENCE



Issue no: 707699



# Installation & Operating Instructions for 'Phoenix' Range IP65 Mini Bulkhead - ELLEDBULK

# SAFETY

This unit should be fitted by a qualified electrician in accordance with the appropriate national/IET wiring regulations. Switch off mains supply before installation and maintenance.

This product must not be modified. Any modification will negate any Safety Mark Approvals and may render the product unsafe. GreenBrook accepts no responsibility for modified products. In order to maintain the IP65 standard it is necessary to ensure that the gasket provided is correctly installed and all mounting fixings and conduit cable entries are sealed with silicon to prevent the ingress of dust and moisture. This product must be installed in accordance with these instructions. This fitting should not be installed in close proximity to any external source of heat or covered with any heat insulating material, air flow around the fitting should not be restricted. Note it is important to ensure sufficient room to adjacent surfaces has been left for the removal of the diffuser. This unit should be connected to the lighting supply circuit, or fused at a maximum of 3A.

## GENERAL DESCRIPTION

This unit is a maintained/non-maintained self-contained emergency luminaire. Suitable for indoor and outdoor use.

ELLEDBULK Maintained or Non-Maintained.

Incorporates 14 x LEDs which can be illuminated via the permanent live connection or using a separate switched live connection.

## INSTALLATION INSTRUCTIONS

Follow these instructions carefully to ensure safe and reliable operation. Retain this leaflet for future reference.

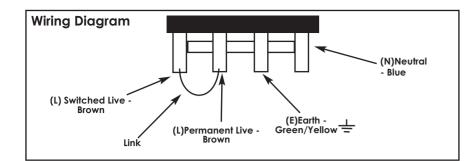
The emergency luminaire should be connected, using a cable of at least 1.0mm cross sectional area, to a stable and permanent mains supply of the correct rated voltage and frequency as stated on the product specification label. This may be from the lighting supply circuit, or fused at a maximum of 3A. To facilitate testing a fused spur box can be included in the unswitched permanent live supply.

All switching etc, shall comply with BS 5266 Part 1. Unless specifically permitted, emergency luminaires should not be connected or controlled by any energy management device.

Before commencing installation, ensure that the electricity supply and battery pack are disconnected.

- 1. Remove diffuser by unscrewing the two cover screws.
- 2. Release the hinged gear tray by easing back the two plastic clips, remove completely if necessary.
- 3. Select and remove a knock out corresponding with the conduit and / or cable run.
- 4. Mount the base in position on a suitable surface ensuring sufficient room has been left for the removal of the diffuser.
- 5. Bring the cable into position and make the correct electrical connections as overleaf:





Terminal (L1): On this unit continuous illumination is provided by a link connected between the L1 and L terminal, this can be replaced by a switch for on/off control. Remove link for non-maintained operation, switched live connection not required for non-maintained operation.

- Terminal (L): This is the live supply to the charging circuit and must be permanent and unswitched.
- Terminal ( $\stackrel{\perp}{=}$  E): This is for maintaining the electrical continuity of an earthed conductor when necessary (looping-in).
- Terminal (N): This is the neutral supply and must be permanent.

The emergency luminaire contains a battery cell pack which is supplied DISCONNECTED from the main circuit for component protection purposes & user safety whilst packed, in transit, or being installed/ inspected.

- 6. Mark the battery cell pack with the date of installation and then RECONNECT the battery lead to the circuit board.
- 7. Refit the gear tray and diffuser in reverse order, taking care to ensure that no wires are trapped and that all fastenings are secure.

## WARNING

The battery cell pack must be RECONNECTED before the mains is switched on.

Failure to comply with these installation instructions may result in irreparable damage to the main circuit.

DO NOT HIGH-VOLTAGE INSULATION TEST THIS UNIT, OR THE LIGHTING SYSTEM WITH THIS UNIT CONNECTED.

Please note once unit is installed the battery should be kept charged, failure to do so will reduce the battery life.

When unit is commissioned the battery label should be dated with the commissioning date and record sheet completed for the first test. Failure to do this may invalidate the warranty.

# COMMISSIONING AND TESTING

Switch on the mains supply and check to ensure that the green LED battery charging indicator is illuminated.

Allow a brief time for initial partial charging and then isolate the permanent live supply by removing the fuse from the fused spur box. Check to ensure the lamp is then illuminated from the battery cell pack supply. After a further 60 hours on a continuous charge, and only at a safe and appropriate time, mains failure should be simulated to ensure that full duration rating is achieved. Thereafter the recharge time is 24 hours.

# MAINTENANCE

Servicing should only be carried out after the luminaire has been made electrically safe.

Cleaning should be carried out at regular intervals to ensure that dirt does not accumulate to an extent that will impair the electrical and / or thermal safety of the luminaire. Regular cleaning will also ensure that the optical performance is maintained.

Battery packs should be replaced when the luminaire fails to meet its rated duration, regardless all batteries must be replaced after 4 years service.

The disposal of components from the luminaire may require consultation with local authorities. The disposal of batteries is subject to Local Authority Regulations, and the By-Laws Department for disposal of toxic waste should be consulted for specific guidance. Battery cell packs must not be incinerated. Do not dispose with household waste, subject to conditions in the WEEE directive.

## ROUTINE INSPECTION & TEST PROCEDURE

All tests should be undertaken during daylight hours at times of minimum risk and be in accordance with the recommendations of BS 5266 Part 1.

**DAILY** - Check that the LED battery charging indicator is illuminated and every lamp in a maintained system is functioning correctly.

**MONTHLY** - In addition to the daily check, a functional test through simulation of mains supply failure should be carried out to confirm lamps are illuminated from the battery cell pack supply. This test need only be approximately 30 seconds. It should not exceed one quarter of the rated luminaire duration.

**SIX - MONTHLY -** In addition to the monthly test, the lamps should be illuminated from the battery cell pack supply for a continuous period of at least one hour.

**THREE - YEARS -** In addition to the monthly tests the lamps should be illuminated from the battery cell pack supply for the full rated duration of the luminaire (180 minutes).

**ANNUALLY THEREAFTER -** As above, i.e, Check that the luminaire operates for the full rated duration.

At the end of each test period the mains supply should be restored and a check made to ensure that the green LED battery charging indicator is illuminated.

Please be advised: Lighting levels are only provided to allow checking of correct operation and determination of correct lighting levels on an escape route can only be made with full photometric data.