

# icebreaker



IP44 application.

 GE Lighting 2D lamps are fitted as standard.

IP44



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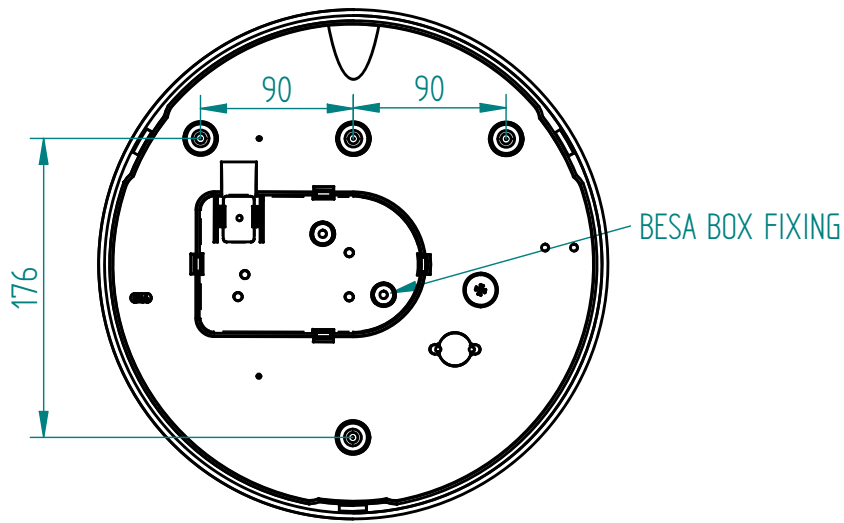
icebreaker



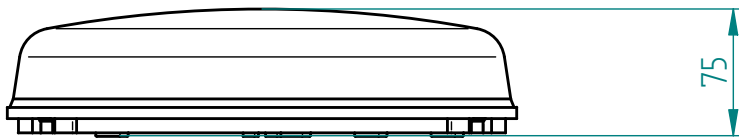
**Fern-Howard**

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T: +44 (0) 1420 470400 F: 01420 489536 E: [lighting@fernhoward.com](mailto:lighting@fernhoward.com) [www.fernhoward.com](http://www.fernhoward.com)

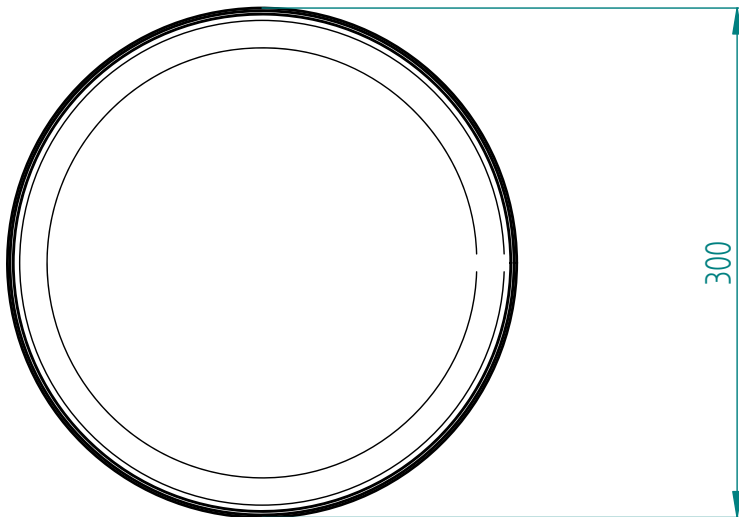
page 1 of 9



FIXING POINTS



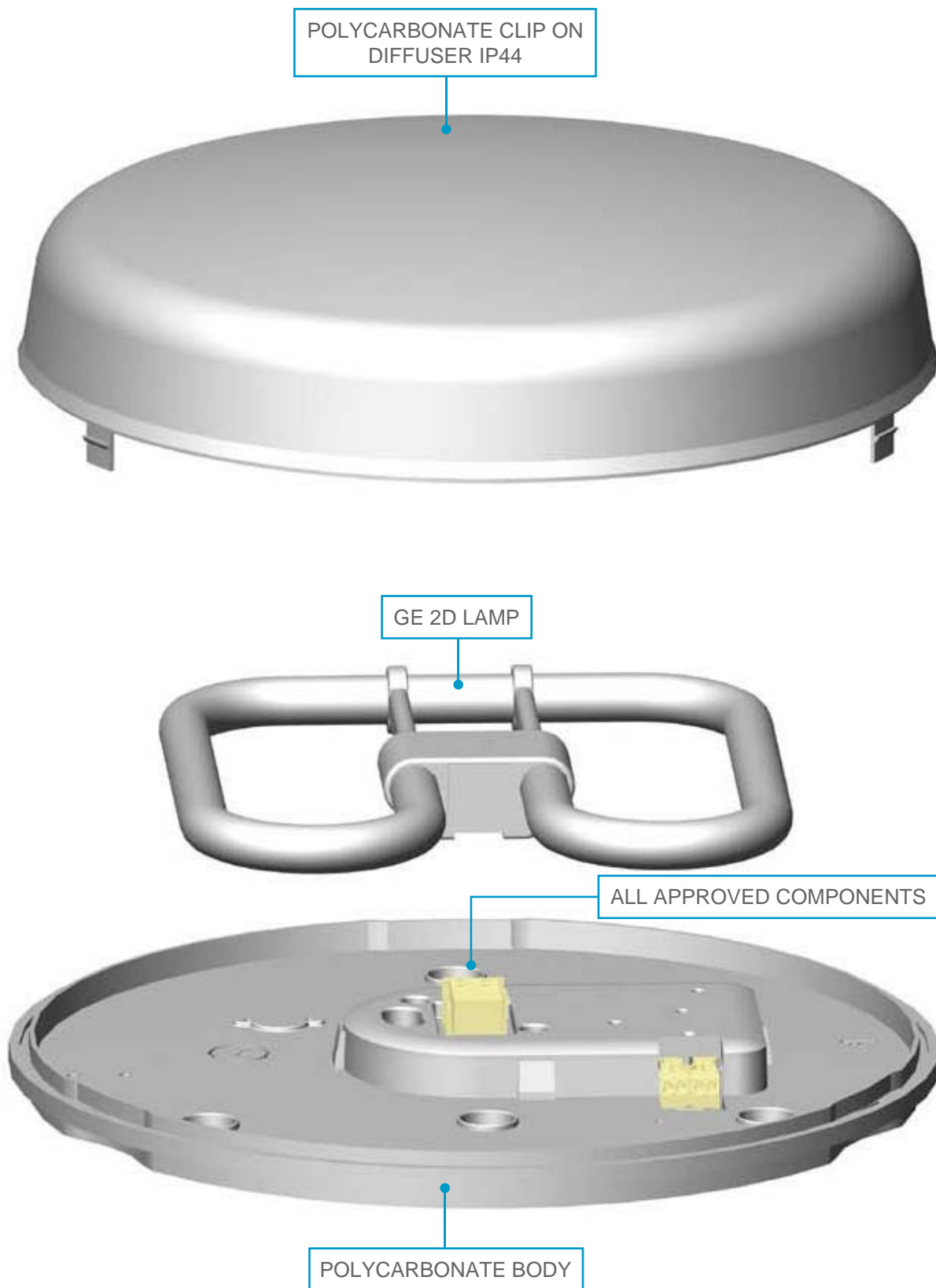
HEIGHT



FOOTPRINT

# icebreaker





## INSTALLATION AND OPERATING INSTRUCTIONS

### **THIS FITTING SHOULD NOT BE USED IN AREAS EXCEEDING 25°C AMBIENT AIR TEMPERATURE**

This fitting must be installed by a qualified electrician and wired in accordance with the latest edition of the IEE Electrical Regulations. Information regarding Part Number, Description, Voltage, Frequency, IP Rating and Lamp type is shown on the label affixed to the box containing the luminaire.

#### Pre-installation

#### **ALWAYS TURN OFF THE MAINS SUPPLY BEFORE COMMENCING INSTALLATION**

Make sure that the mains supply is compatible with the fitting.

If IP rating has to be retained a cable gland of the correct IP rating must be used and any fixing holes must be filled with a proprietary silicon sealing compound.

High voltage insulation test equipment **MUST NOT** be used on High Frequency, Emergency or Dimming luminaires.

The luminaire is suitable for use within ambient temperature range of -10° C to +25° C **ONLY**.

PIR and electronic time switches are not recommended for these luminaires. If used, ensure that there is no "Leakage Current" when in the "Off" position and an "On" time of not less than 20 minutes. Failure to ensure this could potentially impair the performance of the luminaire.

#### Lamp Switching Cycles / Lamp Life

#### **CONSTANT SWITCHING REDUCES LAMP LIFE**

Typical switching cycles should achieve 100% of the manufacturers stated lamp life, however, switching every 5 minutes would reduce this to 20%.

#### Installation

Take out the base moulding.

Drill out the cable entry and any other "Cut Outs" required.

If cut outs are required for conduit fixing (Not BESA) make sure that the hole is drilled high enough in the side of the base to allow the inside nut to be fitted.

Feed the incoming mains through the cable entry gland and secure the base to the mounting surface required using the mounting points provided (failure to do this will cause the fitting to distort) with fixings suitable to support the fitting and for the material to which the base is being attached. Put the gear tray into the Hinge position, tighten the two screws and allow the Gear tray to hinge open.

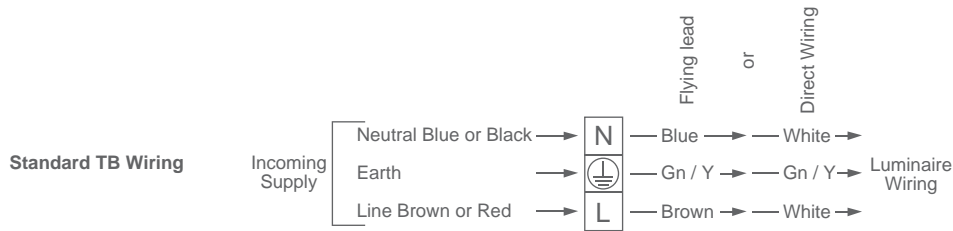
Make sure that the incoming mains cable is long enough to allow the Gear Tray to be completely opened.

Connect the incoming mains to the terminal block.

If using stranded cables, make sure that no stray wires are omitted from the terminal connection.



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Close the Gear Tray (make sure that all cables are clear of the Gear Tray components) and secure with the screw provided.

Fit the lamp making sure that it is securely clipped in.

Clip in the diffuser making sure that it is correctly located.



## GENERAL ROUTINE MAINTENANCE

**At commissioning and handing over of the installation, ensure that a copy of this data is presented to the authority responsible for the operation, maintenance and repair of Luminaires.**

Cleaning of the Luminaire or lamp replacement must only be carried out after the fitting has been isolated from the electrical supply. **ALWAYS** check before servicing.

Cleaning should be carried out at regular intervals to ensure that contaminants do not accumulate to an extent that will impair the thermal safety of the Luminaire, or degrade the optical performance of the lamp. **DO NOT** use Spirit based cleaners.

Failed lamps must be replaced immediately, with "Lamps" of the same type, if a "Starter Switch" is fitted, this should be changed at the same time. Undetected or unattended failed lamp replacement will result in the Ballast unit overheating and ultimately will cause its' failure, rendering the fitting useless.

### Notes:

This luminaire should not be modified or repaired by any persons other than those nominated by the manufacturer.

Any unauthorised modification or repair may render the luminaire unsafe and will invalidate the warranty and conformance to any safety or safety standards that may apply.

The company will accept no responsibility for any modified fittings or for any damage caused as a result of modifications. All details are given as guidance only and do not constitute a contract.

We reserve the right to change or withdraw products without notice.

### Performance and Warranty

This product is warranted for twelve months from the date of installation, provided that the installation is carried out within two months of purchase, subject to the following conditions.

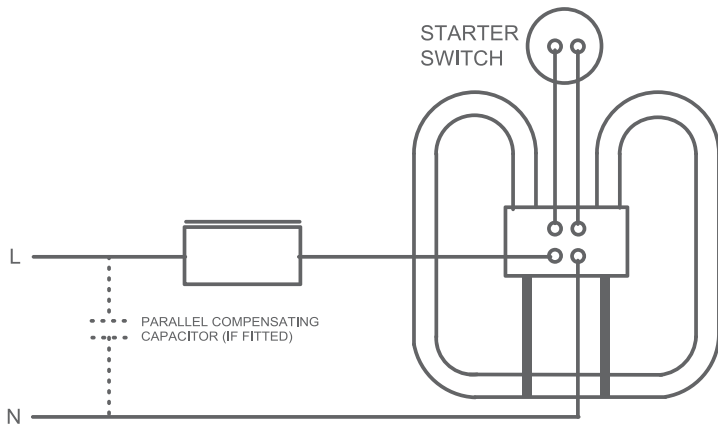
- This warranty will only be valid if the fittings have remained unmodified and used as per this instruction leaflet and our literature.
- Fern - Howard Ltd. shall not be liable for any consequential loss or damage caused directly or indirectly by any defective or otherwise.
- Battery packs are guaranteed for 12 months but are expected to have a life of at least four years if used within the specified temperature limits.

### Disposal

The disposal of any electrical equipment, including this fitting may be subject to Local Authority Regulations and therefore should be consulted for specific guidance.

The batteries within this fitting are Nickel Cadmium and must be disposed of as per Local Authority Regulations for the disposal of toxic waste.





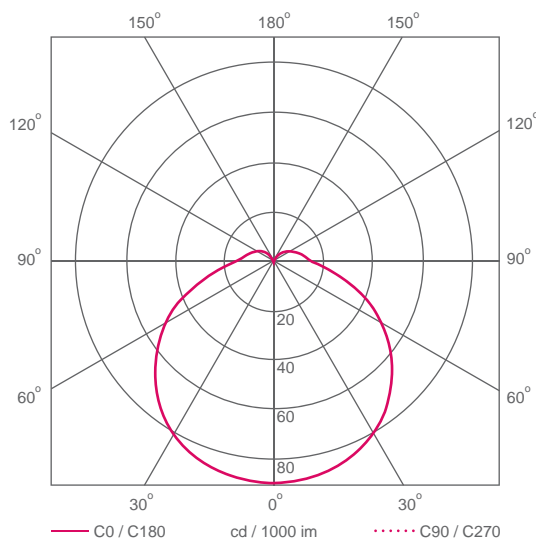
4 PIN LAMP SWITCH START



Lamp	Lumen Output (Mains-Mode)	Approx Lamp Life (Hrs)	MAGNETIC				HF	
			Nominal Lamp Current A	Parallel Correction Capacitor	Corrected Lamp Current A	Circuit Watts Corrected	HF Current A	Circuit Watts
16W	1050	10,000	0.195	2uf	0.09	27.83	0.121	18.0
28W	2250	15,000	0.320	4uf	0.15	34.5	0.130	28.7

Lamp	Weight	Weight HF	Weight EM
28W	1.39	0.86	

Size	300mm Dia x 75 Deep
Cable Entry	Centre Rear BS Style
Body Material	Polycarbonate
Diffuser Material	Polycarbonate
Gear Tray Material	
Lamp	GE 2D 3500K
Wiring	TB 2 x 2.5mm <sup>2</sup>
Diffuser Fixing	Clip In
Control Voltage	240V 50Hz



LOR = 0.37			SHR MAX = 1.57				SHR NOM = 1.50					
Room Reflectances			Room Index									
C	W	F	0.75	1.00	1.25	1.50	2.00	2.50	3.00	4.00	5.00	
0.70	0.50	0.20	0.19	0.22	0.25	0.26	0.29	0.31	0.32	0.34	0.35	
	0.30		0.16	0.19	0.22	0.24	0.27	0.29	0.30	0.32	0.34	
	0.10		0.14	0.17	0.19	0.21	0.24	0.27	0.28	0.31	0.32	
0.50	0.50	0.20	0.18	0.21	0.23	0.25	0.27	0.29	0.30	0.32	0.33	
	0.30		0.15	0.18	0.21	0.22	0.25	0.27	0.28	0.30	0.31	
	0.10		0.13	0.16	0.19	0.21	0.23	0.25	0.27	0.29	0.30	
0.30	0.50	0.20	0.17	0.19	0.22	0.23	0.25	0.27	0.28	0.29	0.30	
	0.30		0.15	0.17	0.20	0.21	0.24	0.25	0.27	0.28	0.29	
	0.10		0.13	0.15	0.18	0.20	0.22	0.24	0.25	0.27	0.28	
0.00	0.00	0.00	0.12	0.14	0.16	0.18	0.20	0.22	0.23	0.24	0.26	

FIGURES BASED ON 28W CORRECTED SWITCHSTART FITTING





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**High Frequency**

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FHE20328R

ICEBREAKER HF ROUND 28W WHITE OPAL

