

# Ceramic Infrared Heaters

The following information should be considered when installing ceramic infrared heaters.

Installation must be carried out by a competent person in accordance with the current edition of the IEE Wiring Regulations (BS 7671: Requirements for Electrical Installations) and any applicable statutory regulations.

The heater should be preceded by a double pole isolating switch preferably with an indicator light.

- The heaters should always be installed using the mounting brackets provided to ensure adequate clearance from the wall.
- Do not touch the heater while it is operating, the surfaces are hot!
- Do not cover the heater, point it at flammable objects, or place items closer than the stated safety distance as this results in a risk of fire
- Heaters should not be installed in areas where hazardous vapours may be present as defined in BS5345
- It is recommended the heaters are operated with the element guard in place. The safety guards are only intended to prevent large objects from directly hitting the ceramic emitters. Some applications will necessitate additional precautionary measures.
- A build up of moisture in the emitter can cause earth leakage currents to flow, causing RCD's to trip. Operating the heater for a few minutes with the RCD removed will expel the moisture and cure the problem. Where heaters with ceramic emitters are installed in damp or wet areas they should be used regularly to stop moisture building up in the emitters.
- Where RCD protection is used the heaters should be installed over several circuits, each with its own protective device.
- The heater should only be installed in an indoor or weather protected environment.

**W. Tombling Ltd**

**Ceramic Infrared**

**Wall Mounted Heater**

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**THESE INSTRUCTIONS SHOULD BE READ BEFORE  
INSTALLATION AND RETAINED BY THE USER FOR  
LATER REFERENCE**

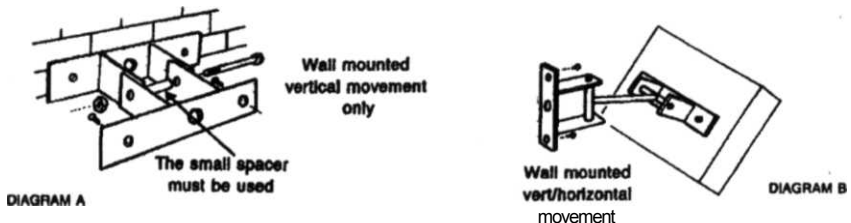
Before installing this heater, please read all the enclosed instructions carefully and follow any recommendations regarding installation and use.

### Electrical installation

The HC range comprises 1, 2 and 3 ceramic element models:

- One and two ceramic single phase 230V heaters are factory fitted with high temperature silicon rubber flexible cable conforming to BS 6500 having a temperature rating of 180°C continuous (H05SS-F).
- Three ceramic heater models are supplied without cables, and configured for single phase 230V operation. They can be converted to 3 phase and neutral 400V by removing the two red wires under the right hand cover. For connection use only silicon rubber flexible cable conforming to BS 6500 having a temperature rating of 180°C (H05SS-F).
- The heaters must be earthed.
- To prevent nuisance tripping use type C MCBs. In multi-heater installations spread the heaters over several circuits.

The heater is supplied with a wall mounting bracket ready for attachment to the heater. Place the heater face down and attach one 'U' bracket to back. Make sure cable gland is towards the bottom of the heater



### Location

- Heaters should be angled at 30° to 45° from the vertical, and never straight down.
- There must always be a minimum clearance of 450mm between the top of the heater and the ceiling.

### Wall mounting

- Decide whether vertical movement only (Diagram A) or vertical/horizontal movement (Diagram B) is required for correct positioning of heaters and assemble as shown.
- Avoid mounting heaters on structures liable to vibrate.
- Recommended mounting heights and safety distances should always be observed.

## Recommended mounting heights

Model	Wall mounting height (m)			Safety distance from heater (m)
	Minimum	<b>Recommended</b>	Maximum	Minimum
HC1500	2.2	<b>2.5</b>	3.5	1.5
HC3000	2.8	<b>3.5</b>	4.5	1.5
HC4500	3.0	<b>4.0</b>	5.5	2.0

## Commissioning

- Perform Insulation and Earth Continuity Tests.
- Switch on the heater(s) and confirm that the ceramic elements are operating.
- Ensure each heater aims its warmth into the target area by adjusting the heater angle(s) as necessary, then tighten the bracket bolts when satisfactory coverage is achieved.
- The user/customer should be made aware of all aspects of operation and safety and is strongly advised to retain these instructions for future reference.
- In unoccupied premises it is recommended the heating system is switched off and isolated from the electrical supply.

## Maintenance

Ceramic heaters contain no moving parts and therefore require little maintenance.

Depending on the environmental conditions heaters should be regularly inspected, (*at least every six months*), for a build up of dust and dirt on the ceramic emitters and reflectors which can cause overheating and premature emitter failure.

## Before any maintenance work is carried out

- Allow the heater case and element to cool to avoid injury.
- Isolate the heater(s) from the electrical power supply.

## Spares

Spare ceramic elements and reflectors are available from your supplier.