

Product Data Sheet Heated Bat Box (Code B1BBHZZZZ)

General

Appearance



Summary



A UK made heated wooden box designed for small crevice dwelling bats such as Common Pipistrelle and Soprano Pipistrelle. Flat Backplane ideal for fitting on walls or cladding of buildings. Made from external grade FSC® Certified European birch plywood with ceramic inserts and thermostatically controlled waterproof ceramic insulated heater. Easy to install with no wiring required. Remote temperature controller connected by 10 metre power/monitoring cord. Operates on mains voltage 220V to 240V AC. Specifications include simplified fitting (no electrician required), enhanced thermal properties and features designed to facilitate inspections by licenced bat workers.

Recommended Use

Use on buildings, trees, poles etc to enhance environmental aspects or as part of a bat habitat mitigation scheme. May be used as part of a BREEAM or CSH assessment. Particularly suitable for replacing bat habitat where a roost enjoys artificial heating such as hot water pipes.

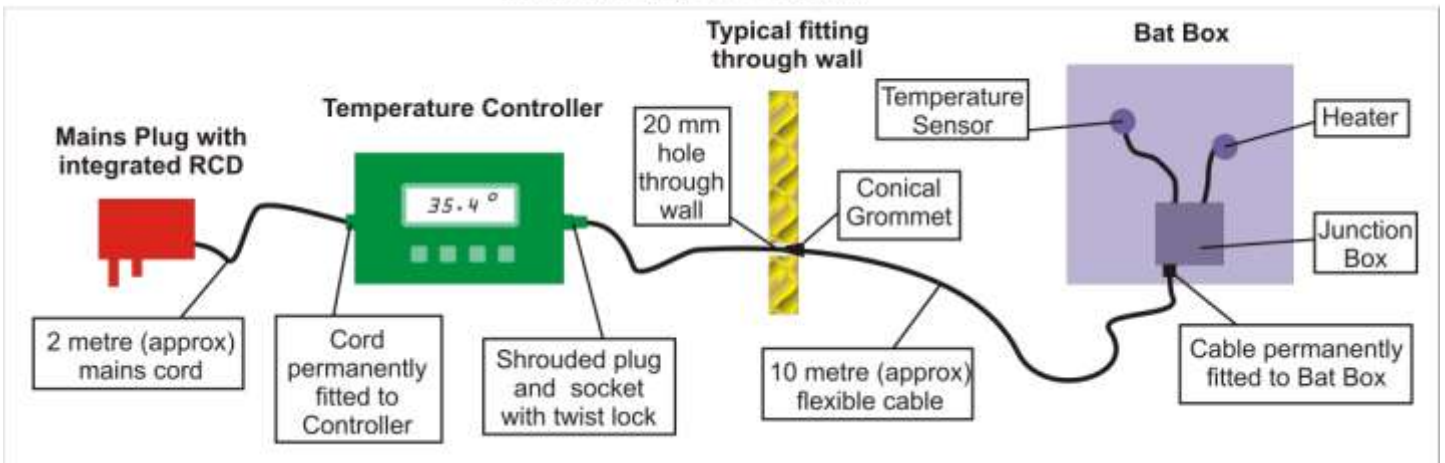
Key Product Features

- Economic solution for replacement of heated bat roosts
- Plug and Play: simple installation with no wiring or electrician needed
- Temperature inside bat box adjustable and controlled from inside building by microprocessor controller
- 10 metre power cord suitable for most buildings; Extension cables available
- Safe: integrated RCD protects against shock; heater intrinsically safe; wiring protected to IP66
- Retains proven features from **Improved** range of bat boxes

| Specification and Features | | |
|---|---|--|
| Bat Box | | |
| External Height (mm) | 490 | |
| External Width (mm) | 260 (Body), 282 (Including Cable Gland) | |
| External Depth (mm) | 130 | |
| Mounting Holes | 4 x 4mm Diameter | |
| Weight | 8.0 kg | |
| Colour | Black | |
| Fitting | Screw or nail to wall or flat surface; fit by nails, screws, cable or strap to tree or other uneven surface | |
| Entrance Configuration | Slot at base running from left wall to right wall of box; Bat landing ladder extends below entrance and internally up to top of box | |
| Entrance slot width (mm) | 17 | |
| No of Internal Crevices | 3 | |
| Construction Material (body) | 12mm external grade European Birch plywood Certified FSC [®] MIX and Rainforest Alliance Certified [™] <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">  Rainforest Alliance Certified[™] </div> <div style="text-align: center;">  The Mark of Responsible Forestry </div> </div> | |
| Fabrication | Plywood panels precision cut using computer controlled equipment; Panels assembled with surface sunk galvanised staples | |
| Access for Monitoring etc (Requires Bat Licence) | Removable Roof with 2 stage opening: Stage 1: Remove external roof (secured with 1 stainless steel screw) Stage 2: Lift off roof insulation (no tools required) (interior not exposed until after Stage 2) | |
| Thermal Characteristics | Natural Heat Gain | Increased by black surface coating, convection into box from landing ladder |
| | Thermal Inertia | Birch ply outer enhanced with ceramic inserts designed to increase heat retention |
| | Number of Ceramic Inserts | 3 |
| | Total Thermal Capacity of Box including Ceramic Inserts and Plywood Outer (estimated) | 11.0 kJ/K |
| | Insulation | Provided by 12 mm plywood walls and foam insulation above crevices. |
| | Air Movement | Close fitting panels and roof (precision cut by CNC routers), with insulation above crevices, and single slot entrance at base to restrict airflow and reduce air changes, resulting in improved heat retention and different temperatures in each crevice |
| | Internal Heater | Hermetically sealed double insulated unit with ceramic core and insulation, metal sheathed and surface temperature limited, operating at 240V AC, with metal "fireguard" mounted near base of box |
| | Internal Temperature | Controlled by separate remote microprocessor controller |
| Temperature Sensor | NTC resistance type, nominal value 10,000Ω | |
| Junction Box | Mounted on base of bat box with permanently connected cable to Temperature Controller, and connections to heater and temperature sensor inside Bat Box; Wiring joints enclosed within glass fibre reinforced polypropylene junction box with thermoplastic elastomere sealing and cable gland. Protected to IP66. | |
| Power/Sensor Cable From Bat Box to Temperature Controller | Approx 10 metres long flexible cable rated 500V / 6A; A end: Permanently fitted through cable gland to Junction Box; B end: Shrouded male connector to temperature controller; Fitted protective flexible conical grommet manufactured from Z-PVC for securing/weatherproofing wall hole. | |
| Wall Hole Size | When installing Cable through wall, 20mm Diameter hole required to clear connector | |
| Principle Conformances | EN 60529 (IP66); EN 60335-1 (Class II) | |

| Temperature Controller | | |
|--------------------------------------|--|--|
| Housing | ABS with rubber feet | |
| External Height (mm) | 54 | |
| External Width (mm) | 95 (Body), 122 (Including Cable Gland and Socket) | |
| External Depth (mm) | 160 | |
| Colour | Black | |
| Measuring Range | -50°C to 99°C | |
| Controller Operating Conditions | 0°C to 60°C 20% to 85% RH (non-condensing) | |
| Controller Type | Microprocessor; 5 character display (when in operation displays temperature in Bat Box) 4 buttons for function setting | |
| Memory | Non-volatile memory stores parameter settings on power down | |
| Power Consumption | Less than 3W | |
| Controller Functionality | On/Off Set temperature Set difference temperature Normal operation Alarm with sounder and display when measured temperature less than -50°C or greater than 99°C or malfunction of sensor Display shows temperature in bat box and whether heater is on Power/Sensor cable to bat box with fitted protective conical grommet manufactured in Z-PVC for use when installed through circular wall hole. Power cord to UK-style mains plug with integrated RCD | |
| Principle Conformances | EN 61010-1; EN 61326-1; EN 60529 (IP40) | |
| Mains Plug with Integrated RCD | | |
| Designed to Protect | Entire system and all users (bats and humans) | |
| Power Cord to Temperature Controller | Approx 2 metres | |
| Rated Voltage | 240V AC | |
| RCD Type | Double Pole RCD Contact Breaker Non-Latching - Requires reset each use | |
| Rated Trip Current | 30mA | |
| Typical Trip Speed | 40mS | |
| Fuse Rating | 3A | |
| Principle Conformances | BS 7071; EN 60309-2; BS 1362 | |
| Product | | |
| Environmental | Certifications | Certified Forest Stewardship Council® MIX C007915; Rainforest Alliance Certified™; RoHS Certified; CE Marked |
| | Surface Finish | External wooden surfaces treated with water-based non-toxic non-volatile wood treatment, with active constituent natural borate mineral salt. Tested to EN71-3: no traces found of Antimony, Arsenic, Barium, Cadmium, Chromium, Lead, Mercury or Selenium. Ecotoxicity: Finish not classified as dangerous to the environment |
| | Electrical | WEEE Producer Registration Number: WEEE/HB0002ZR Battery Producer Registration Number: BPRN03345 |

Schematic Diagram of System



Key Features of Bat Box

