## **INSTALLATION** INSTRUCTIONS

100mm 4" / 120mm 5" / 150mm 6" RANGE OF WALL / BATHROOM / TOILET EXTRACTOR FANS

Switch off mains supply before making any electrical connections.

Installation must be supervised by a qualified electrician.

This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory and mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance.

Cleaning and user maintenance shall not be made by children without supervision.

Precautions must be taken to avoid the back-flow of gases into the room from the open flue of gas or other open-fire appliances when mounted in outside windows or walls.

Fan must be disconnected from electrical power before any maintenance is carried out.

Wiring

## Location

- 1. When installing fan through an external wall, an external wall grille must be fitted at all times.
- For best results this Extractor Fan should be fitted as high on the wall as possible, or if preferred, on the ceiling. Note: Pullcord models should not be installed in a ceiling.
- Do not install the unit within a shower cubicle or anywhere else where there is a risk of being sprayed with water (Please see our range of showerfans for these installations.).
- If the fan is installed in a room containing a fuel burning appliance, the installer must ensure that the air replacement is adequate for both the fan and the fuel burning appliance.

- Switch off mains supply before making electrical connections. If in any doubt contact a gualified electrician.
- These units are for fixed wiring only. A flexible cord must not be used. All wiring must be fixed securely and the cable to the fan should be a minimum of 1mm<sup>2</sup> in section. All wiring must comply with current I.E.E. Regulations or local regulations if outside the UK.
- 3. A double pole fused spur having contact separation of at least 3mm in all pole must be used and fitted with a 3A fuse.
- 4. This fan is double insulated and does not require an earth connection.
- 5. The fan should not be accessible to a person using either the shower or the bath.

1. Cut a hole in the wall. If the fan is to be fixed in the ceiling ensure that the hole is between the joists. Fit ducting flush to the plaster. See below for appropriate hole size.

100mm 4" - 112mm 4.5"
120mm 5" - 140mm 5.5"
150mm 6" - 173mm 6.75"

- 2. Remove the cover from the fan by removing the two small screw caps on the front cover and remove the two retaining Philips screws.
- 3. Hold the body of the fan against the wall or ceiling and mark the four screw holes and the cable entry. IMPORTANT: Ensure that the fan is square on wall or ceiling.
- Bring power cable into position, as marked. Allow an extra 230mm (9") protruding to facilitate connection. (Diagram 1)
- Wiring of Standard Model. Requires live and neutral power supply. Refer to internal wiring label for correct connection. (Diagram 1)

The fan can either be operated from a separate pullcord switch fitted to the ceiling of the room or can be connected to the light switch so that the fan will start when the light is switched on.

- 6. Wiring of Pullcord Models. This model is not suitable for ceiling fixing. This fan has its own integral pullcord on/off switch. Requiring a live and neutral supply, refer to internal wiring label for correct connection.
- 7. Wiring of Timer Model. This fan requires a neutral, switch live and permanent live supply. Refer to internal wiring label and Diagram 2 of this instruction for correct connection. The fan can either be operated from a separate pullcord switch fitted to the ceiling of the room or can be connected to the light switch so that the fan will start when the light is switched on. For Timer Adjustment refer to the following diagrams:

Diagram 4 for 100mm 4" / 120mm/5" Diagram 5 for 150mm/6"



## Wiring of Humidity Model

(Time Delay with Humidity Sensor Over-ride) - Diagram 6. For the fan to operate a normal time delay unit with humidity over-ride i.e. when connected with a switch live coming from the light switch into the fan. The fan will operate when the light is switched on, and switch off after about 20 seconds to 20 minutes (timer is pre-set for the minimum). However should the humidity in the room reach about 75%, which will happen if the shower is run or the bath filled with hot water, the fan will switch on and keep running until the humidity has been reduced to a normal level, about 65%. Requires neutral, switch live and perm live supply. Refer to internal wiring label and Diagram 2 of this instruction for correct connection.

Wiring of Humidity Pullcord Model (Humidity Sensor with Pullcord Override) This fan requires a permanent live and permanent neutral supply. See diagram 1, Refer to internal wiring label for correct connection. The fan will operate should the humidity in the room reach to a higher level than the sensor detects and will run continuously until the humidity level is reduced. The fan is fitted with a pullcord Override that will operate the fan when the humidity is not high enough to operate the sensor.

**Electrical Connections:** PIR Model with Timer This fan requires permanent live and permanent neutral supply. See internal wiring label for correct connection. The fan is sensitive to movement and will switch on when someone enters the room. Diagram 3 indicates the range of PIR sensor. When the room is vacated the fan will run for approximately one minute.

**PIR Timer adjustment** (Diagram 3) The time delay can be increased by firstly switching off the power to the fan, remove the front cover and insert a small screwdriver into the slot. Turning clockwise increases the time and turning anti-clockwise reduces the time. **FOR ELECTRICAL RATING REFER TO FAN INTERNAL LABEL** Refer to Fan IP rating (see Internal Rating Label) for recommended safe siting of fan.



