

Installation Manual

150mm Through-Wall Fan for Bathroom Extraction

Thank you for your purchase of our company's product. It has been manufactured following current technical safety regulations and is in compliance with AS/NZ60335 standard.

Please read this instruction booklet carefully before installing or starting up the product.

It contains important information on personal and user safety measures to be followed while installing, using, and carrying out maintenance work on the equipment. Once the product has been installed, please hand this booklet to the end user.

Before installing the fan, it is important to understand the way this fan functions.

The fan is designed to be continuously powered.

When first powered on, the fan will run at trickle speed for 30 seconds to initialise and learn the bathroom environment.

After this, the fan will stop and stay in standby while monitoring the bathroom environment. When the fan detects a sudden change in the bathroom environment, it will respond by starting up and increasing its speed accordingly.

Once the bathroom environment recovers, the fan will slow down to trickle speed and continue running for another 10 minutes. If no more environment changes are detected, the fan will stop and return to standby.

The installation of a wall switch in the bathroom is highly recommended but optional. Please refer to page 5 for detailed switch functionality.

TRANSPORT AND MANIPULATION

The packaging used for this apparatus has been designed to support normal transporting conditions. The apparatus must always be transported in its original packaging as not doing so could deform or damage the product. Do not place heavy weights on the packed product and avoid knocking or dropping it.

The product should be stored in a dry place in its original packaging, protected from dust and dirt until it is installed in its final location. Do not accept delivery if the apparatus is not in its original packaging or shows clear signs of having been manipulated in any way.

Check that the apparatus is in perfect condition while unpacking. *Any fault or damage caused in origin is covered by our company guarantee.* Please make sure that the apparatus coincides with the product you have ordered and that the details on the rating label fulfil your requirements.

Important information for the safety of installers and user:

Installation must only be carried out by qualified persons. Make sure that the installation complies with the applicable building and electrical regulations.

This appliance is not intended for use by young children or infirm persons unless they have been adequately supervised by a responsible person to ensure that they can use the appliance safely. Young children should be supervised to ensure that they do not play with the appliance.

This apparatus must not be used in explosive or corrosive atmospheres. If a fan is going to be installed to extract air from premises where a boiler or other combustion apparatus are installed, make sure that the building has sufficient air intakes to assure adequate combustion. The extractor outlet must not be connected to a duct used to exhaust smoke or fumes from any appliance that uses gas or any other type of fuel.

INSTALLATION OVERVIEW

Before commencing installation, select a suitable place for the fan to be installed in the external wall. Locate and avoid wall studs when determining fan placement. The fan must not be placed inside zone 1 (see image 1) as the fan is powered by mains voltage and could pose an electrocution hazard.

Drill a 152mm hole through the wall for the fan, either using a circular hole saw or other means. Wire the fan power lead and switch cable as per the wiring diagram (see image 2). Place the fan inside the hole and remove its face plate by undoing the screw on the bottom edge of the fan. Mount the fan by placing the screws provided in the screw holes in the fan and fastening them to the wall - make sure the fan is level and spins freely as you do this.

Once the fan is mounted, replace the face plate and screw in place, making sure the grille is positioned correctly and no wires are cinched beneath the grille or face plate.

Note: wiring mains power should only be carried out by a registered electrician.

Once the fan is in installed, place a short length of 150mm aluminium ducting over the fan spigot from outside, then install a cowl or louvre grille on the other side as required.

ELECTRICAL CONNECTION

The extractor fan must be connected to a single-phase mains network, with the specific voltage and frequency according to the specifications on the fan rating label.

The electrical installation must include an isolating switch in accordance with New Zealand electrical standards. Earthing is not required as this fan has double insulation (Class II).

Please note that this model of fan must be wired with a fixed permanent connection.

SAFETY DURING INSTALLATION

Make sure there are no loose elements near the fan, as they could run the risk of being sucked up by it. If it is going to be installed in a duct, check that it is clear of any element that could be sucked up by the fan. When installing an apparatus, make sure that all the fittings are in place and that the structure which supports it is resistant enough to bear its weight at full functioning power.

Before manipulating the apparatus, make sure the mains supply is disconnected, even if the machine is switched off.

If the fan is installed in a duct, the duct must be used for the extraction system only.

STARTING UP THE FAN

Fans may have delayed startup, or may operate under the control of the inbuilt controlling electronics included with the fan. Always take extreme care as the fan may start unexpectedly. Always disconnect the fan from power during maintenance.

Before starting up the fan, ensure that:

The apparatus is well secured and the electrical connections have been carried out correctly. Any electrical safety devices are correctly connected, adequately adjusted and ready for use. The wire and electrical connection inputs are correctly sealed and water-tight. If the fan has been mounted in a duct, make sure it is clear of any loose material that could be sucked up by the fan.

When starting up the fan, ensure that:

The propeller turns in the correct direction.
There are no abnormal vibrations.

If the circuit protection device is tripping during operation, the apparatus must be quickly disconnected from the mains supply. The whole installation should be carefully checked before trying to start up the machine again.

MAINTENANCE

Before manipulating the fan, make sure it is disconnected from the mains supply - *even if it has previously been switched off*. Prevent the possibility of anyone else connecting it while it is being manipulated.

The apparatus must be regularly inspected. These inspections should be carried out while bearing in mind the machine's working conditions, taking care to avoid dirt or dust accumulating on the propeller, turbine, motor or grids. This could be dangerous and perceptibly shorten the working life of the fan unit. While cleaning, great care should be taken not to damage the propeller.

All maintenance and repair work should be carried out in strict compliance with each country's current safety regulations.

For further information, please contact EvolutionFX NZ Limited

email: info@evolutionfx.co.nz

phone: +64 9 558 5590

FAN WIRING (IMG 1)

Our standard fan includes two sets of wires: the power lead and the external switch. Please refer to the images below to ensure the fan is wired correctly to prevent damaging the fan.

Power Lead:

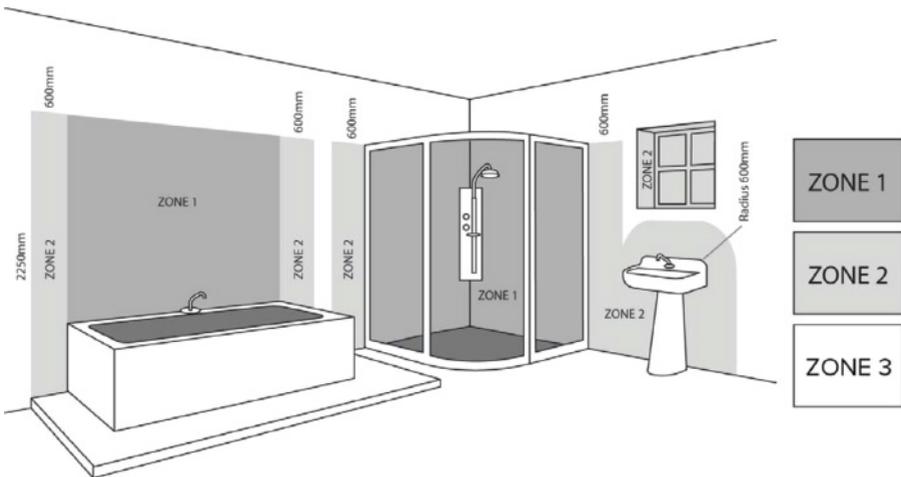
Blue = Neutral  N
Brown = Phase  L

External Switch - Dry Contact ONLY:

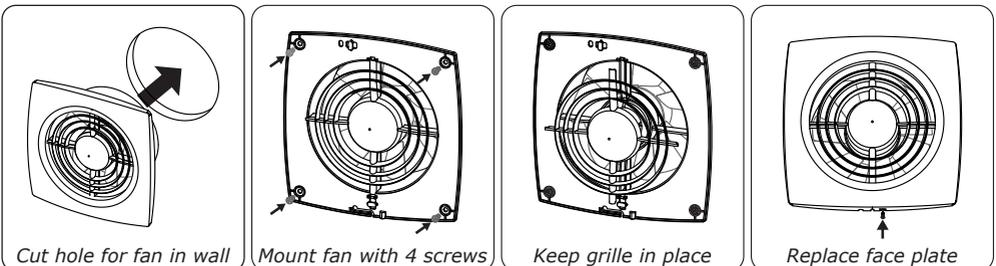
Red = Switch Signal (5V)  SIGNAL
Black = Common (GND)  GND

BATHROOM ZONES (IMG 2)

This through-wall fan model is suitable to be placed inside zone 2 and zone 3 only. **DO NOT install the fan inside zone 1 (image below).** Only low voltage equipment may be installed in zone 1. This means avoiding wet areas - directly above the shower or bath (up to 2250mm above floor level) and 150mm around the shower cubicle.



FAN INSTALLATION (IMG 3-6)





Through-Wall Extraction

Semi-automatic humidity activated extraction fan - suitable for Bathroom and Laundry Extraction

Thru-wall and thru-ceiling kits available

Manual and Auto modes selected through low-voltage external wall switch (*not supplied*)

External Wall Switch Functions

Short Press - 0.5-1s

Short press once: enter BOOST mode

Short press again: restart BOOST mode

Long Press - 4-5s

Long press once: switch to MANUAL mode and stop fan

Long press again: return to AUTO mode (default) and run fan on TRICKLE speed for 10 minutes

Fan Operation Modes

AUTO mode [default]

The fan continuously monitors the bathroom air. When high humidity is detected, the fan will speed up to remove the bad air from the bathroom. Once the bathroom environment returns to normal, the fan will slow down and run on TRICKLE speed for 10 minutes before turning off again.

Manual mode

The fan will only turn on if the switch is pressed (short press). This will make the fan enter BOOST mode. Once BOOST mode is finished the fan will turn off again until the switch is pressed again or the fan is switched to AUTO mode.

BOOST mode

The fan will run on BOOST speed for 5 minutes, then slow down to run on TRICKLE speed for 10 minutes. Once this is finished the fan will turn off again.

Through-Wall Fan Wiring

Power Lead

Blue = Neutral

Brown = Phase



Remote Switch - Dry Contact ONLY

Red = Switch (5V)

Black = Common (GND)



**For further assistance and queries related to this product,
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