

## **Installation Manual**

#### FVO101 - 150mm FC Axial 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 increase to 40% speed and run for two minutes to purge the bathroom and learn the environment.

Over the next 10 minutes the fan will continue to slow down until it reaches the trickle speed ( $\sim$ 10 l/s). The fan is now monitoring the bathroom for a change in the environment.

On detecting a change, the fan will respond and increase the speed accordingly. Once the environment has been restored, the fan will once again slow down to the trickle speed.

This model fan does not include the option of adding a remote wall switch.

#### **INSTALLATION OVERVIEW**

Before commencing installation, select a suitable place for the fan to be installed in the ceiling cavity. The fan will be placed centrally within the ducted system, but should be no more than 2 metres away from the inlet grille.

It is recommended to suspend your fan from the ceiling framing with the chain provided in order to minimise the sound levels resonating through the ceiling framing.

Attach one end of the flexible duct to the spigot of the inside grille with the duct tape provided. Pull the ducting out to the fan, cut it to the desired length, and tape it onto the fan inlet.

Attach the remaining ducting to the fan outlet and feed the other end through the exterior grille hole. Ensure the ducting is long enough to tape onto the spigot of the outside grille. Cut off excess ducting and tape the end to the grille. Push the grille into place and fasten to the wall/soffit.

#### Please note:

The inlet of the fan unit is on the side of the fan blades, the side that is not obstructed by the metal frame. There are also arrows on the unit and rating label showing airflow direction. Excessive ducting and sharp bends lower the fan's performance. Before cutting the ducting, ensure the duct is long enough, with gradual bends.

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## **EVOAQ Bathroom Extraction**



#### 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.

#### 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.

#### **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 with a contact clearance of at least 3 mm, correctly sized and in accordance with the electrical standards.

Earthing is required as this is an earthed product (Class I).

If the fan model you have purchased is not fitted with a power cord then please note that it 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 clean 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.

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## **EVOAQ Bathroom Extraction**



#### 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.

#### **FAN MOUNTING**



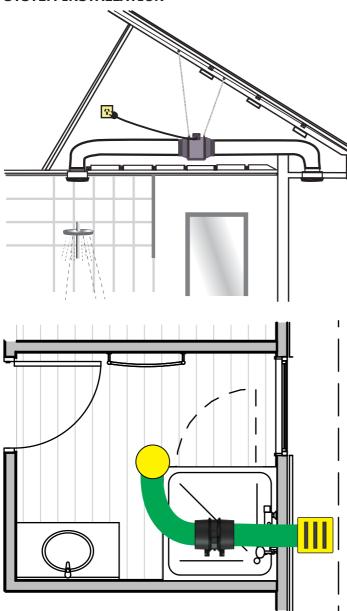
Suspend the fan with chain



EVOAQ extraction fan - outlet side



#### **SYSTEM INSTALLATION**



For further information, please contact EvolutionFX NZ Limited  $\,$ 

email: info@evolutionfx.co.nz phone: +64 9 558 5590

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# **EVOAQ Bathroom Extraction** *Installation Tips*





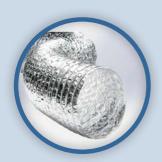
#### **Extraction Inlet**

Place extraction inlet within 1-2 metres from the shower or bath

The inlet should not be placed directly above the shower unless absolutely necessary

#### Recommended Holesaw size

• 152mm (150mm vent)



### **Flexible Ducting**

Avoid any sharp bends or corners when placing ducting - choose the shortest route

Use plenty of tape to secure ducting onto fan, extraction inlet and outlet grille

#### Recommended Ducting Length

- Up to 2m between inlet and fan (max 3m)
- Up to 4m between fan and outlet grille



## **EVOAQ Extraction Fan**

Use chain to suspend fan from rafters - do not screw the fan directly to the timber!

Keep ducting straight and level with the fan Plug fan into power point using the power cord provided

If no powerpoint is available, one should be installed by a registered electrician

## Disconnect power before handling the fan to prevent damage or injuries









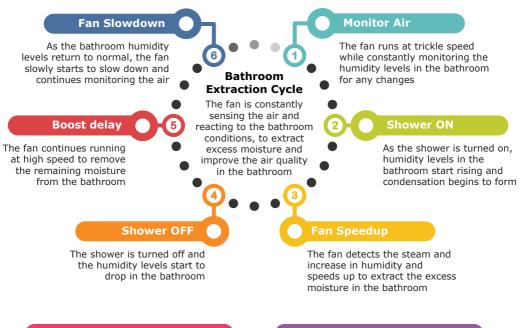
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#### **Automatic Bathroom Extraction Fans**

EVOAQ Extraction fans work by running at a low trickle speed and constantly monitoring the moisture levels within the bathroom.

In-built controls and sensors in the fan control the fan speed to extract any excess moisture and protect your bathroom.



#### Start-up Boost

30 seconds after being plugged in, the fan goes into a 2-minute startup boost on high speed, to ensure bad or stale air is removed from the bathroom, before the fan slowly slows down and begins its

Bathroom Extraction Cycle

#### **Boost Switch - optional**

A remote low-voltage switch can be wired into the fan as a 'boost switch'.

If the switch is on, the fan runs at high speed. When the switch is turned off again, the fan slowly slows down and resumes its

Bathroom Extraction Cycle



Fully Automatic
Bathroom Extraction.

Just Plug and Play.

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## Warranty Certificate

#### **Owner's Details**

First Name:	
Last Name:	
Address:	
City:	Postcode:
Email:	
<b>Product Details</b>	
Model Number:	
Installer Name:	

EvolutionFX Ltd warrants to the purchaser that this product is free from defects in the material and workmanship for a period of five years from the date of original purchase. The warranty only operates if proof of purchase in the form of a bill of sale, invoice or purchase receipt is presented at the time of request of service.

The customer shall ensure that the goods are fit and suitable for the purpose for which they are required. EvolutionFX Ltd is under no liability if they are not.

The warranty is in addition to all other conditions, warranties, guarantees, rights and remedies which may be applied by relevant legislation in New Zealand.

The warranty will not be applicable if the product has not been installed, operated and maintained in accordance with the manufacturer's instructions and recommendations contained in operating & installation instructions provided with the product, or if the product has been used in a manner other than for which it was originally designed, or if the damage, malfunction or failure has resulted from incorrect voltages, alterations, accidents, misuse, neglect, abuse, faulty or improper installation or mains supply problems, including lightning surges.

This warranty is limited to the product only (expressly excluding labour and transport costs) and is dependent on it being returned to point of purchase. EvolutionFX Ltd reserves the right to repair or replace any warranty item at its discretion.

