

# Installation Manual

## 150mm EC Mixed Flow Fan for Kitchen 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 (~10 l/s) for 5 minutes while the VOC (Volatile Organic Compounds) sensor is warming up. After five minutes, the fan initialises the sensors and starts monitoring the kitchen environment. If the fan detects steam or a sudden change in VOC levels, it will increase its speed accordingly up to 50%. If both steam and high VOC levels are detected (i.e. cooking in progress), the fan will speed up further, up to 100%.

Once the kitchen environment has been restored, the fan will slow down slowly until it reaches trickle speed again, or until further steam or VOCs have been detected.

**This fan is not the same as/direct replacement for a rangehood. The inlet grille must be placed at least 1m away from the stove, not placed directly above it.**

## 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 3 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 the end where you can see the fan blade clearly. There are also arrows on the unit 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.

## **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 not required as this fan has double insulation (Class II).

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.

## 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, grime 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](mailto:info@evolutionfx.co.nz)

**phone:** +64 9 558 5590

## FAN BODY REPLACEMENT (IMG 1 - 3)



## KITCHEN ZONES (IMG 4)

The kitchen extraction inlet grille must be placed at least 1m away from the stove. **DO NOT install the fan within 1m of the stove or directly above the stove (image below) as there is risk of fire being transferred to the extraction ducting.**

While the extraction ducting may contain fire retardant, to minimise risk of cooking fires being spread to the rest of the house through the extraction ducting system, the inlet grille or diffuser must be installed at least 1m away from the stove and 1m away from the area directly above the stove.

This kitchen extraction system can be used in conjunction with a separate rangehood.





## Inlet Diffuser

Place inlet diffuser at least 1 metre away from the kitchen stove.

The diffuser should not be placed directly above the stove to minimise risk of fire.

### Recommended Holesaw size

- 152mm (150mm diffuser)



## Ducting

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

Use plenty of tape to secure ducting onto fan and extraction inlet & outlet grilles.

### Recommended Ducting Length

- 1-3m between inlet and fan
- Up to 5m between fan and outlet grille



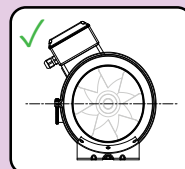
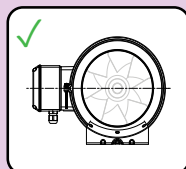
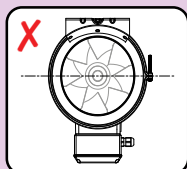
## EVOAQ Kitchen Extraction Fan

Use chain to suspend fan from rafters to minimise noise from 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.

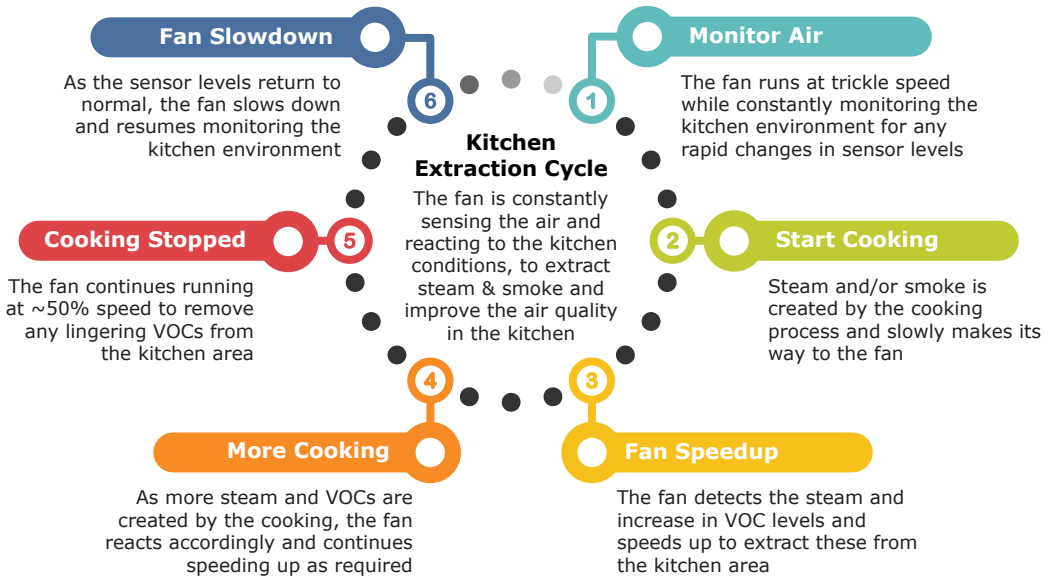
**Do not install the fan upside down as this will damage the fan**



## Automatic Bathroom Extraction Fans

EVOAQ Kitchen Extraction fans work by running at a low trickle speed and constantly monitoring the VOC, temperature and moisture levels within the kitchen.

In-built controls and sensors in the fan control the fan speed to extract steam and VOCs caused by cooking, among other things, inside and around your kitchen.



### Sensor Warm-up

For the first 5 minutes after being powered on, the fan runs on trickle speed only while the VOC sensor warms up - this is to prevent any erratic behaviour caused by incorrect sensor readings during warm-up.

### 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 Kitchen Extraction Cycle

**Fully Automatic  
Kitchen Extraction.  
Just Plug and Play.**



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## Warranty Certificate

### Owner's Details

First Name: \_\_\_\_\_

Last Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ Postcode: \_\_\_\_\_

Email: \_\_\_\_\_

### Product Details

Model Number: \_\_\_\_\_

Installer Name: \_\_\_\_\_

Installer Email: \_\_\_\_\_

Date Installed: \_\_\_\_\_

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.