## "AXR"

# Centrifugal In-line Fans for RADON mitigation for residential and commercial use

**Installation, Operating and Maintenance Instructions** 







vectaire



### "AXR" - MECHANICAL EXTRACT UNIT - SUITABLE FOR CONTINUOUS OPERATION INSTALLATION AND OPERATING INSTRUCTIONS

#### This product MUST be installed by a professional technician

PLEASE READ THE FOLLOWING INSTRUCTIONS VERY CAREFULLY BEFORE USING THE PRODUCT. THE MANUFACTURER WILL NOT BE HELD RESPONSIBLE AND DECLINES ANY AND ALL LIABILITY FOR DAMAGE CAUSED TO PERSONS OR PROPERTY DUE TO IMPROPER USE WITH REFERENCE TO THE PRECAUTIONS OUTLINED IN THIS MANUAL.

THIS MANUAL MUST ALWAYS BE READILY AVAILABLE.

AXR100: 4"/100mm spigot, max capacity 59 l/sec
AXR125: 5"/125mm spigot, max capacity 74 l/sec
AXR150: 6"/150mm spigot, max capacity 115 l/sec
AXR160: 6.3"/150mm spigot, max capacity 120l/sec



WARNING: Extreme care must be taken in installing this product in order to avoid serious injury or death both to installer and user. This instruction MUST be followed for installation.

- 1. Do not use this product for any purpose other than that for which it was designed and as shown in this leaflet
- 2. Remove all packaging and check that your fan has not been damaged in transit, in particular that the body and impeller are not damaged or deformed, that the movement of the impeller is not impaired and it moves freely on the shaft. If in doubt, contact your supplier.
- 3. Do not leave packaging within the reach of children or unskilled people. Dispose of hazardous waste (polystyrene, plastic, polypropylene, etc.) responsibly.
- 4. If the product is dropped or badly knocked, contact your supplier, dealer or manufacturer to ensure that it is operating properly.
- 5. Using any electrical equipment requires compliance with basic safety rules:
  - do not touch the appliance with damp or wet hands (or any other part of the body)
  - the product must not come into contact with liquid of any sort
  - the product must not be operated by children or other unskilled people.
- 6. The product should only be connected to the mains electricity supply or electrical outlet if:
  - your electrical voltage and frequency correspond to those shown on the rating label.
  - the capacity of your electricity supply is sufficiently powerful to operate the product at its maximum power If this is not the case, contact professionally qualified personnel.
- 7. Before carrying out any maintenance or cleaning operation, the product must be switched off and disconnected from the main power supply.
- 8. If a fault, malfunction or anomaly of any type occurs, the product should be made inoperative (by turning off the switch and by disconnecting it from the mains electricity supply) and qualified personnel contacted immediately. Always request original spare parts to carry out any repairs.
- 9. If the product needs to be removed, turn off the mains electricity supply and disconnect the appliance
- 10. The unit should be installed in a safe location as far away as possible from children and/or unskilled people.
- 11. The electricity system to which the product is connected must comply with the current standards.
- 12. In order to comply with Construction (Design & Management) Regulations, sufficient access for safe maintenance or removal following installation, MUST be provided for this product.



WARNING: Damage can be caused to this product if the following instructions are not followed.

- 1. This product is professionally manufactured and complies with the current standards regarding electrical equipment
- 2. This product conforms with the EEC directive EMC 89/336 concerning the suppression of radio interference and electromagnetic compatibility.
- 3. This product must not be used in an ambient temperature greater than 50 °C (122 °F).



- 4. Do not leave the product exposed to the weather (rain, sun, snow, etc.).
- 5. Possible product applications are indicated in this leaflet.
- 6. Do not place the unit or any part of it in water or liquids.
- 7. When cleaning or performing routine maintenance, check the condition of the appliance.
- 8. To avoid the risk of fire, do not use the product in the presence of inflammable substances or vapours such as alcohol, insecticides, gasoline, etc.
- 9. The air or fumes being extracted must be clean and free from greasy particles, soot, chemical and corrosive agents, flammable or explosive mixtures
- 10. The device must be installed by professionally qualified personnel.
- 11. The product must be connected to the electricity supply by means of a triple-pole switch with a minimum contact opening distance greater than 3 mm.
- 12. To ensure optimum operation, do not block the air intake and exit vents.
- 13. If the room being ventilated contains a fuel burning appliance, the installer must ensure that air replacement is adequate both for the fan and the fuel burning appliance. Care must be taken to avoid back flow of gases into the are where the product is installed.
- 14. The unit should not be used as an activator for water heaters, stoves, etc.
- 15. Any ducting used must be free from blockages
- 16. Where ducting is installed in an unheated space, all of the ducts should be insulated.
- 17. Your fan **MUST NOT** be exhausted into a duct which is already used for any other purpose (see Approved Document F1 2006 for guidance). It **MUST** discharge directly outside the building.
- 18. For optional operation, there should be an adequate recirculation of air in the area where it is fitted. Consult Building Regulations for correct procedure..

THIS PRODUCT IS EQUIPPED WITH A MANUAL RESET PROTECTION DEVICE WHICH WILL TRIGGER IN CASE OF A FAULT. THE FAULT MUST BE ELIMINATED BEFORE A MANUAL RESET IS CARRIED OUT. ANY FURTHER RESETTING WILL ONLY BE POSSIBLE BY DISCONNECTING THE EQUIPMENT FROM THE POWER SUPPLY.



RADON is a radioactive gas produced naturally; it is invisible, odourless and tasteless. It can be present in the house without being detected. In outdoor air, RADON is diluted and does not present a problem, but in enclosed spaces it can reach high levels and become a health risk.

One solution is to install a pipe in the floor of the foundations to convey it to the outside through a "hermetic" active sump fitted with a fan.



This appliance is hermetically sealed.

DO NOT SEPARATE THE PARTS!!!



#### **INSTALLATION**

#### THIS PRODUCT MUST BE INSTALLED BY A QUALIFIED TECHNICIAN

No product in this range weighs more than 20kgs so it is possible for installation to be carried out by one person. Gloves or other protection should be worn when moving and installing the product.

The product should be installed as shown in Fig 1 below.

The product should be firmly fixed using wall mounting brackets or clamps if the installation is made directly on the duct work.

#### This product has been designed for ducted installation.

After the product has been started, check:

- 1. That the direction of rotation is correct, ie according to the way it is shown on the contact box.
- 2. The electricity supply corresponds with the rating label
- 3. The product should not be vibrating excessively this can compromise the product stability.

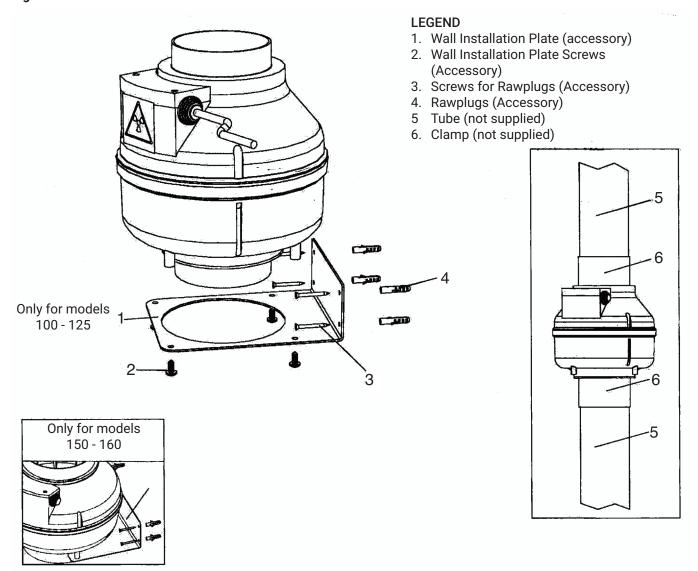
If the product is connected via a regulator of any sort, ensure that the regulator has sufficient capacity to be used with the product.

#### **OPERATION**

The fan should start immediately it is connected to the mains electricity via the control switch.



Fig 1



#### **TROUBLESHOOTING**

PROBLEM	CAUSE AND REMEDY
Appliance does not switch on	There is no electricity supply. Check the main switch and/or electrical connections
The impeller does not turn	Check that its movement is not obstructed

#### MAINTENANCE AND CLEANING MUST ONLY BE CARRIED OUT BY QUALIFIED PERSONNEL

Before starting maintenance or cleaning operation, the appliance MUST be switched off and disconnected from the mains electrical supply.

Inspections should be carried out after six months of continuous operation.

Check the integrity of all parts during normal cleaning.

#### **DISMANTLING AND RECYCLING**

of t

If a crossed-out wheeled bin is illustrated on a product, this means that the product satisfies the requirements of the 2012/19/EU European Directive. Conform to the local norms regarding the disposal of waste materials and do not dispose of old products in normal domestic waste material.