envirovent.

NITROBOX NO2 FILTER INSTALLATION GUIDE FOR ENGINEER / INSTALLER



Safety

Important: Read these instructions fully before the installation of this appliance

- 1. Installation of the appliance and accessories must be carried out by a qualified and suitably competent person and be carried out in clean, dry conditions where dust and humidity are at minimal levels.
- 2. Installation and maintenance personnel must wear suitable safety clothing to minimise the accident risk.
- 3. This manual covers the installation and maintenance of the EnviroVent NitroBox NO2 Filter.
- 4. The unit must be stored in a clean and dry environment. Do not install the appliance in areas where the following may be present or occur;
- Excessive oil or grease laden atmosphere.
- Corrosive or flammable gases, liquids or vapours.
- Ambient temperatures above 80°C or below -5°C.
- Humidity levels above 90% or is a wet environment.

- 5. The appliance is not suitable for installation to the exterior of the dwelling.
- 6. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children should be supervised to ensure that they do not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.
- 7. Ensure that external grilles are located away from any flue outlet, in accordance with relevant Building Regulations.

Recommendation

- 1. Any flexible ducting used must be pulled taught;
- 2. Ducting must be installed in such a way that resistance to airflow is minimised;
- 3. Duct joints to the unit's duct ports must be fixed using a method that ensures a long term seal is achieved.

Handling

- Before off-loading products, please ensure that the means of transport/ lifting is suitable to accommodate the required weight and size capacity;
- 2. Manually handle unit in accordance with the 89/391/EEC-OSH standard (and associated updates) and/or local regulations.

Packing Contents

Inspect the unit when taking delivery. Check the unit for damage and that all accessories have been supplied. Package supplied with:-

- NitroBox NO2 Filter system (including active carbon filters and G4 pre-filter as standard) x 1.
- Product Manual x 1.
- 3mm Hex Key with inset magnet x 1.

Any shortages or damage must be immediately reported to the supplier.

Contents

Safety	
Important Information	1
Recommendation	2
Handling	
Packing Contents	2
Product Information	
Component Identification	4
Dimensions	5
Installation	
Mounting	6
Wall Mounting	7
Ducting Connection	
Airflow Direction	8
Ducting Connection	8
Ducting Behind Unit	8
Maintenance	
Filter Replacement	9
Pre-Filter	9
Active Carbon Filters	
Filter Installation Date	
How to Change Filters	
Disposal of Filters	10

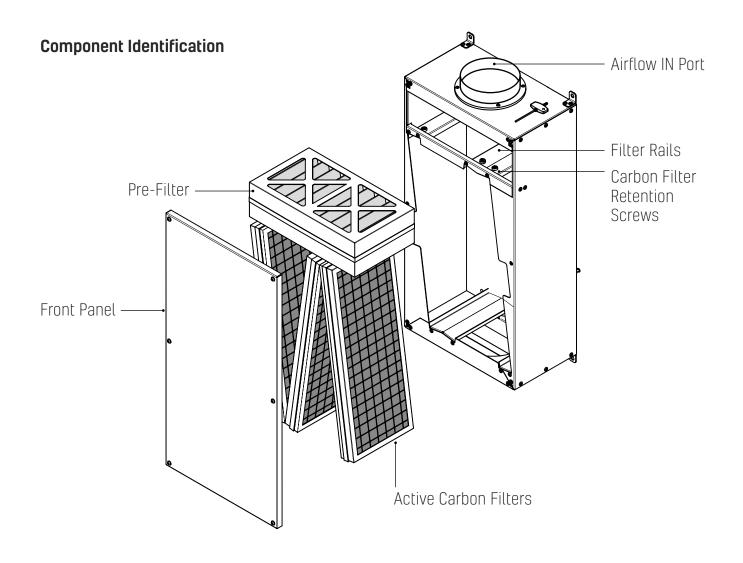
Accessories and Spare Parts List

Removable Insulation Jacket	11
Filters	11
NO2 Testing Kit	11
Fitting Kit	11
Warranty	
Terms of Warranty	12

Product Information

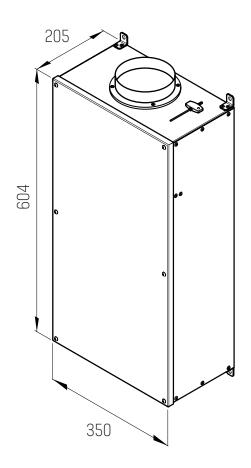
The NitroBox NO2 Filter reduces Nitrogen Dioxide (NO2) which is prominently produced by exhaust gases from diesel engines. Due to this pollution arising in cities and urban areas there is a need to implement mitigation measures to improve the indoor air quality (IAQ). The NitroBox NO2 Filter is an effective means of reducing high NO2 levels down to an acceptable level of $40\mu g/m^3$ as a mean annual concentration level.

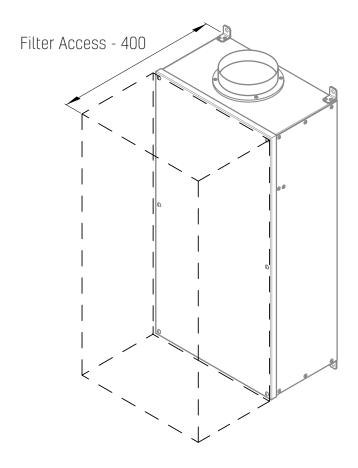
The units are fully foam insulated. This reduces duct bound noise and thermal transmission and helps to avoid condensation build up. Where the unit is installed in very cold spaces or if the outside air is below -5°C then a custom designed removable insulation jacket is available from EnviroVent, see Accessories and Spare Parts List.



Product Information

Dimensions (mm excluding ports)





Port Size

Round: Ø150mm

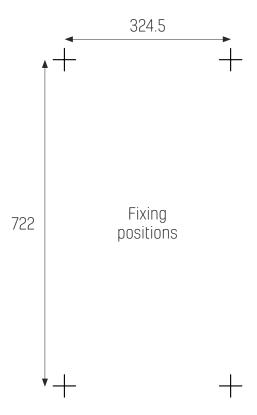
Installation Instructions

Read and observe the guidance and safety information

- The NitroBox NO2 Filter is designed to be mounted in any orientation.
- The mounting surface substrate must be sufficiently strong to support the unit.
- Ensure there is sufficient access around the unit for future maintenance.
- Do not 'box-in' the unit making access to the unit difficult for maintenance and repair.

Mounting

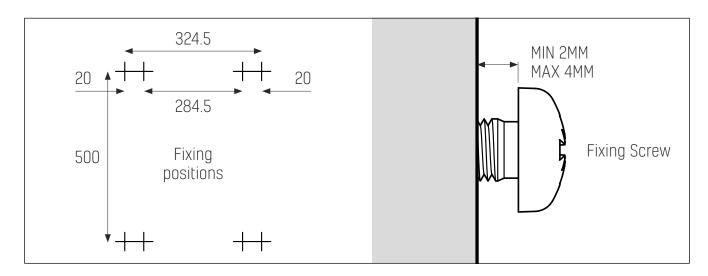
- 1. Mark positions of the mounting holes onto the mounting surface using dimensions as shown.
- 2. Prepare the mounting surface in the positions specified for four Ø8mm fixings. Fixings must be suitable for the mounting surface substrate and the weight of the unit. Fixings are not supplied due to the variation in materials. For advice on suitable fixings contact your local specialized fixings dealer.
- 3. Mount the unit using selected fixings.

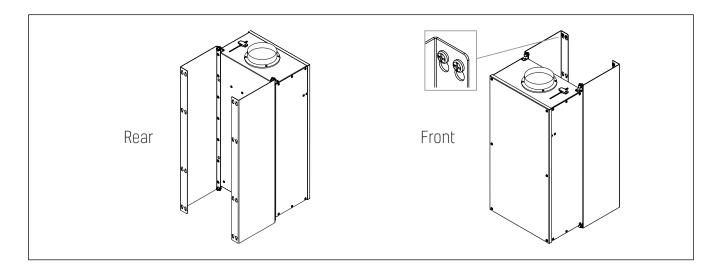


Installation Instructions

Wall Mounting (Vertical Only) Ducting Behind Unit

- 1. Attach the mounting brackets to the unit using M8 fixings provided (EV-FILTBM-NO2).
- 2. Mark positions of mounting holes onto wall using dimensions as shown.
- 3. Prepare the wall in the positions specified for eight Ø6mm fixings at the marked positions. Fixings must be suitable for the mounting surface substrate and the weight of the unit. Fixings are not supplied due to the variation in materials. For advice on suitable fixings contact your local specialized fixings dealer.
- 4. When fitting screws position the head leaving between 2mm and 4mm gap between wall and underside of head, see illustration.
- 5. Guide slots in mounting bracket over fixing screw heads. Lower the unit so that the fixing comes to rest in the slots in the mounting brackets ensuring that all fixings heads are within the slots.
- 6. Connect ducting in the method shown opposite.





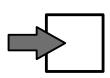
Ducting Connections

Airflow Directions

The NitroBox NO2 Filter uses a prefilter and active carbon filters, the air to be filtered must pass though the prefilter before the active carbon filters, therefore it is very important that ducting is connected correctly

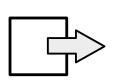
Ducting Connection

The NitroBox NO2 Filter has labels with icons indicating the airflow IN and airflow OUT ports.



IN

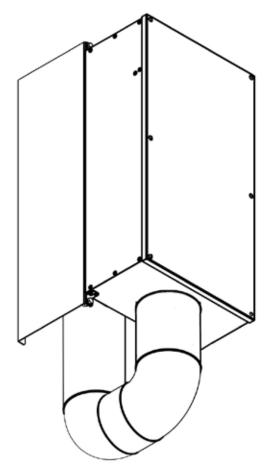
This label defines that the port at this end of the unit must have airflow going into the unit.



OUT

This label defines that the port at this end of the unit must have airflow leaving the unit.

Ducting Behind Unit



Mounting Ducting Behind Unit

Maintenance

Filter Replacement

Prefilters should be replaced at least annually, or more regularly dependent on environmental conditions, the expected life of the Active Carbon Filters should be between 3 & 5 years. New filters can be purchased from EnviroVent Ltd. See filter codes on page 11...

Prefilter

Prefilter can be changed by the householder. Replacing the prefilter for a higher grade (G4 to F7) will increase the system resistance and may require re-commissioning to maintain the design airflow rates.

Active Carbon Filters

Changing of active carbon filters should be carried out by experienced or trained personnel in accordance with safety requirements as defined by the "Control of Substances Hazardous to Health" (COSHH) Regulations. i.e. Someone who fully understands the design, operation and implications of the product and its use.

Filter Installation Date

It is important to know when the unit has been installed so that at a later date the occupant can use this to determine when the filters should be replaced. The installer should mark the installation date label on the unit to show when it was installed, month and year.

An additional installation date label comes loose with the unit which can be applied to a more visible place in cases where the NITROBOX is installed in a restricted access area. The installer should mark up this label in the same manner as for the label on the unit

Maintenance

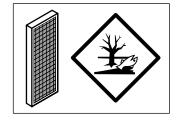
How to Change Filters

- 1. Remove front cover using 3mm Hex Key provided.
- 2. For pre-filter slide out filter from casing using handle attached to filter.
- 3. For active carbon filters unscrew M5 screws using 3mm Hex Key on the top mounting rails as shown, and slide out filter from casing. Only perform this action one filter at a time as filters may drop when mounted in a ceiling void.
- 4. Replace active carbon filters one at a time. Slide filter into casing and fully screw down the M5 screw in filter rail, do not over tighten.
- 5. Replace pre-filter by sliding back into casing. Ensure the airflow direction corresponds with the direction arrow on filter.

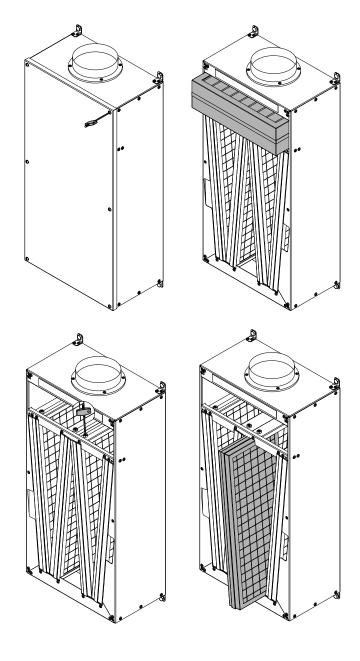
Disposal of Filters

The carbon within the filters are impregnated with chemicals and therefore has to be treated as specialist waste. The disposal of the filters must be carried out by a specialist waste disposal company and not by the inhabitant of the property.





The Active Carbon Filters are Dangerous for the Environment



EnviroVent do not offer a waste disposal service and therefore cannot accept filters for disposal.

Accessories and Spare Parts List

Removable Insulation Jacket

EnviroVent can provided a custom designed removable insulation jacket for the NitroBox NO2 Filter which will provide 30mm of insulation material with thermal conductivity of 0.04W/ (m.K). This jacket needs to be wrapped around the unit before mounting to a wall or ceiling. The unit must be offset from the wall or ceiling by a minimum of 30mm for space required for the insulation material. The method of offsetting the unit must be able to support the weight of the unit. The insulation jacket can be opened by means of hook and loop fasteners on flaps at the front and this will give access to the filters for inspection and replacement.

Model Part Number	Removable Insulation Jacket
EV-FILTB1-NO2	EV-FILTBJ-N02
EV-FILTB2-NO2	EV-FILTBJ-N02



Filters

Model Part Number	G4 Pre- Filter	F7 Pre- Filter	Active Carbon Filter
EV-FILTB1-	FILTER-G4-	FILTER-F7-	FILTER-C-
NO2	FILTB	FILTB	FILTB1
EV-FILTB2-	FILTER-G4-	FILTER-F7-	FILTER-C-
NO2	FILTB	FILTB	FILTB2

Fitting Kit

Model Part Number	Ducting Behind Unit Mounting Kit
ALL MODELS	EV-FILTBM-NO2

Warranty

We appreciate you choosing this quality EnviroVent product, which is designed and manufactured in Harrogate, North Yorkshire. We are confident that you will be delighted with the performance of the system and the resulting improvement in air quality in your home after the installation of the unit.

The EnviroVent Nitrobox NO2 Filter unit is covered by a three year warranty, subject to the specified maintenance stated within this instruction guide.

If your fan has been supplied and installed by EnviroVent it is covered with a full parts and labour warranty. If you detect a fault, please contact us on **01423 859 395**. You will be given guidance over the phone, or an arrangement may be made for a member of our team to visit (call-out charges may apply if a fault cannot be identified).

If your fan has been supplied by EnviroVent and installed by a third party, it is covered by a parts only warranty. If you detect a fault and the product has been installed in accordance to the fitting/wiring instructions, relevant guidance documents and by a competent and qualified person (proof may be required), please return the product to the place of purchase for a replacement.

Warranty Conditions & Exclusions

Please note that a receipt will be required as proof of purchase. Fans bought from an unapproved source, including but not limited to auction websites, are not covered by the warranty. The system must be correctly installed and operated according to the instructions contained in the user guide supplied. The warranty will be rendered invalid if the system has been serviced, maintained, repaired, taken apart or tampered with by any person not authorized, which in any way contradicts the instruction guide set out by EnviroVent. The warranty does not cover accidental damage, misuse or abuse. The warranty is in addition to your statutory or legal rights.

Your unit serial number	
For warranty conditions and exclusions visit www envirogent com/war	rantv

Service Record

Serviced By	Company	Date	Notes

Weee Directive

To all residents of the European Union; Important environmental information about this product. This symbol on this unit or the package, indicates that disposal of this unit after its lifecycle could harm the environment.

Do not dispose the unit as unsorted municipal waste; it should be disposed by a specialized company for recycling. This unit should be returned to your distributor or to a local recycling service. Respect the local environmental rules. If any doubt contact your local authorities about waste disposal rules.





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Due to our policy of continuous innovation and improvement EnviroVent reserves the right to alter products specification and appearance without notice.



Please read carefully to ensure simple installation and a long trouble free life for the user.

AFTER INSTALLING THIS UNIT PLEASE PASS ONTO END USER **DO NOT THROW AWAY**

We want to hear from you

Your feedback is important to us as we strive to improve our products, services, and overall customer experience. Please email us to help us serve you better: feedback@envirovent.com