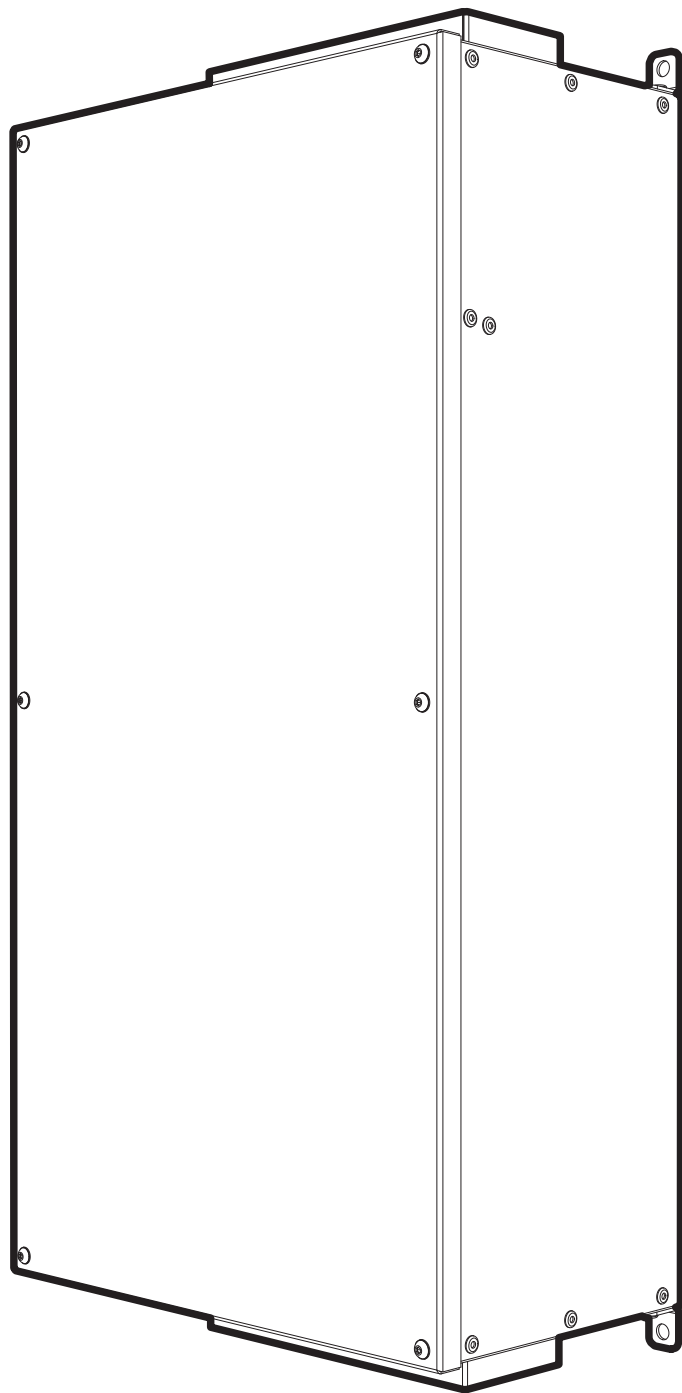


EN



UNIT ONE
UNIT TWO

TP550 220x90 TP552 Ø160 TP554 Ø150 TP 556 Ø180
TP551 220x90 TP553 Ø160 TP555 Ø150 TP557 Ø180

Trimbox NO₂ Filter[®]

Product Manual



 **Titon**[®]
ventilation systems

Warnings, Safety Information and Guidance

Important information

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 Titon® Trimbox NO₂ Filter® system.
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.
7. Children should be supervised to ensure that they do not play with the appliance.
8. Ensure that external grilles are located away from any flue outlet, in accordance with relevant Building regulations.

Titon® Recommend

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

1. 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:-

- Trimbox NO₂ Filter® system;
- Product Manual x 1;
- 3mm Hex Key with inset magnet x 1;
- Filter Installation Label.

Any shortages or damage must be immediately reported to the supplier

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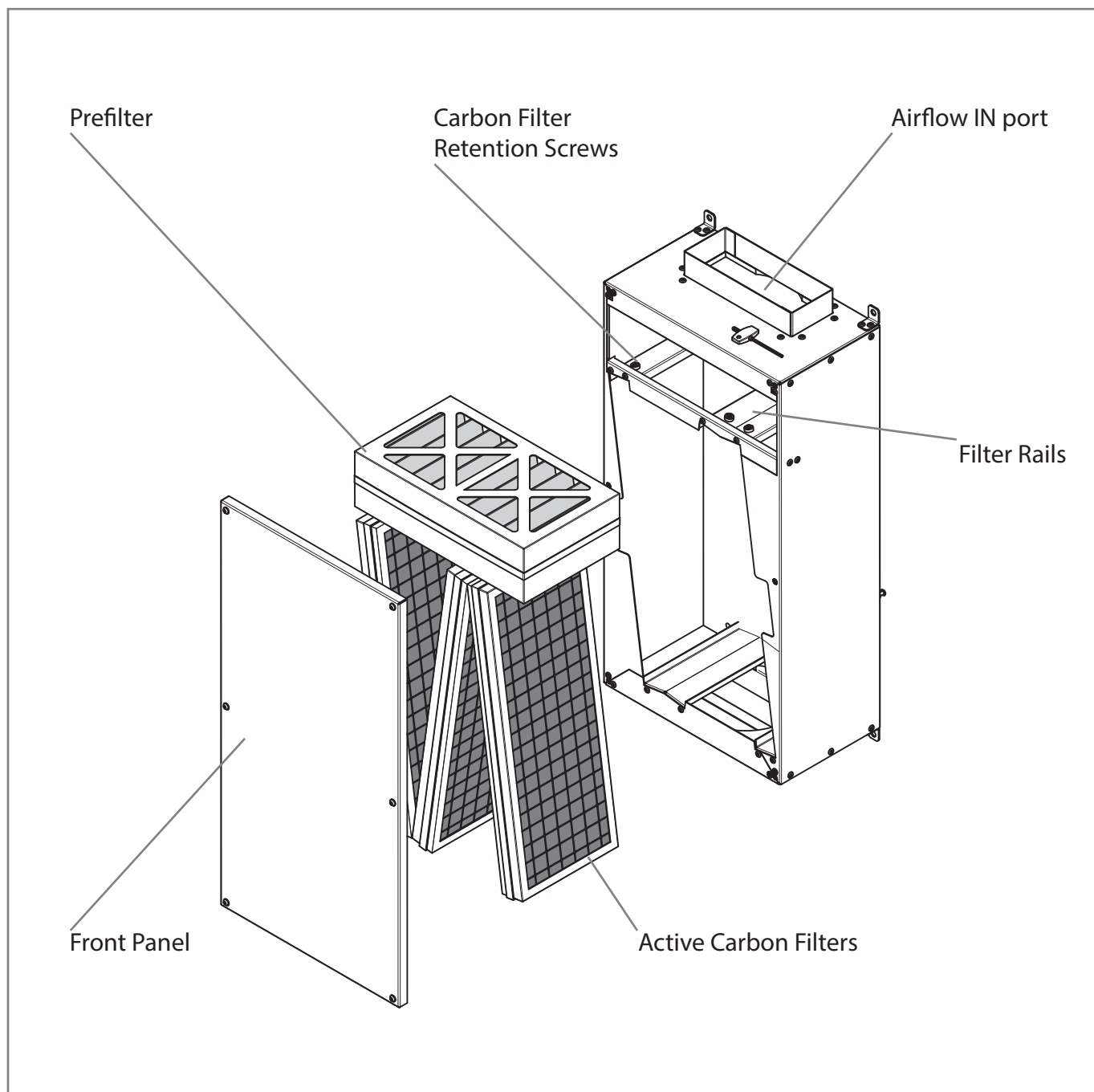
When this document is viewed as a PDF the headings & sub headings on this page are hyper links to the content. Additionally the page numbers in this document are hyper links back to this contents page.

Product Description

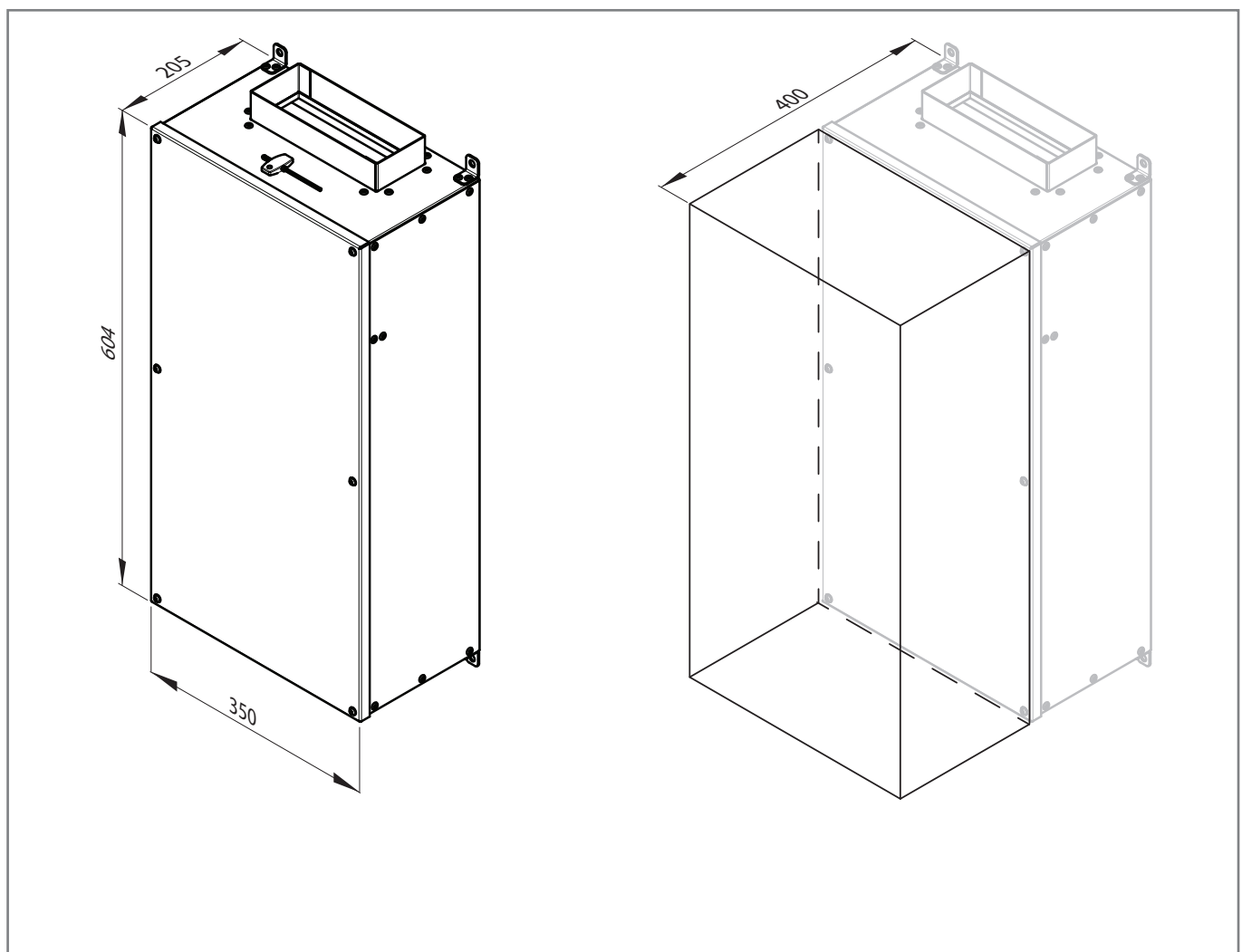
The Titon® Trimbox NO₂ Filter® reduces Nitrogen Dioxide (NO₂) which is prominently produced by exhaust gases from Diesel engines. Due to this pollution arising in cities and urban areas there is a need to implement mitigation measures to improve the indoor air quality (IAQ). The Titon® Trimbox NO₂ Filter is an effective means of reducing high NO₂ levels down to an acceptable level of 40µg/m³ 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 Titon® see Accessories and Spare Parts List.

Component Identification



Dimensions



Unit Dimensions (excluding ports)

Port Size(s)

Rectangular Ports: 220mm x 90mm
Round Ports: Ø150mm, Ø160mm and Ø180mm

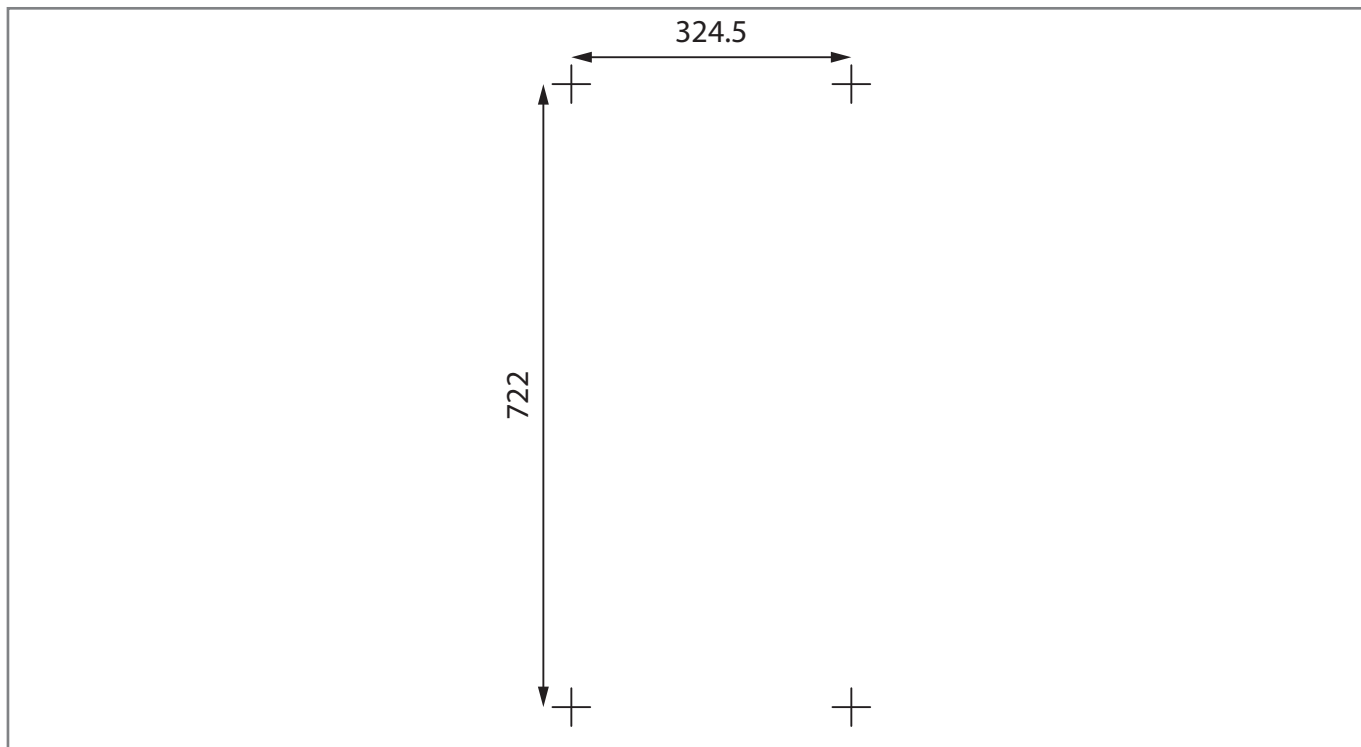
Trimbox NO₂ Filter[®]

Read and observe the guidance & safety notices listed in Warnings, Safety information and Guidance .

- The Trimbox 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 NO₂ unit for future maintenance.
- Do not 'box-in' the unit making access to the unit difficult for maintenance and repair.

Mounting

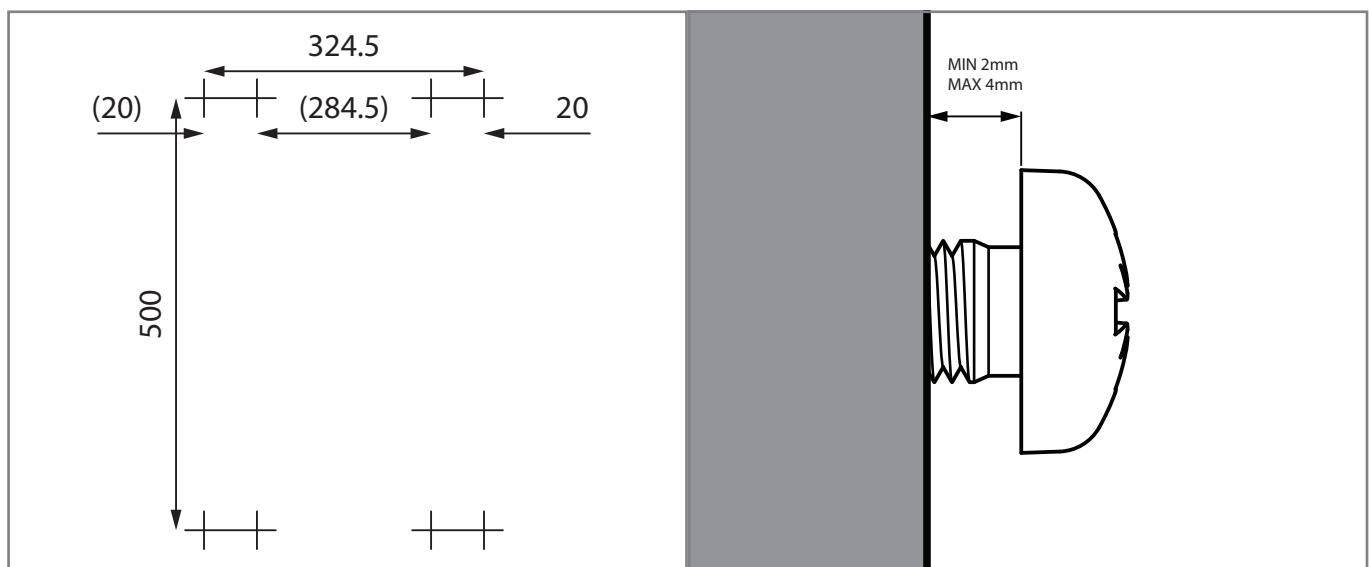
1. Mark positions of the mounting holes onto the mounting surface using dimensions as shown.
2. Prepare the mounting surface in the positions specified for four Ø8mm fixings. Fixings must be suitable for the mounting surface substrate and the weight of the unit. Fixings are not supplied due to the variation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



Fixing Positions

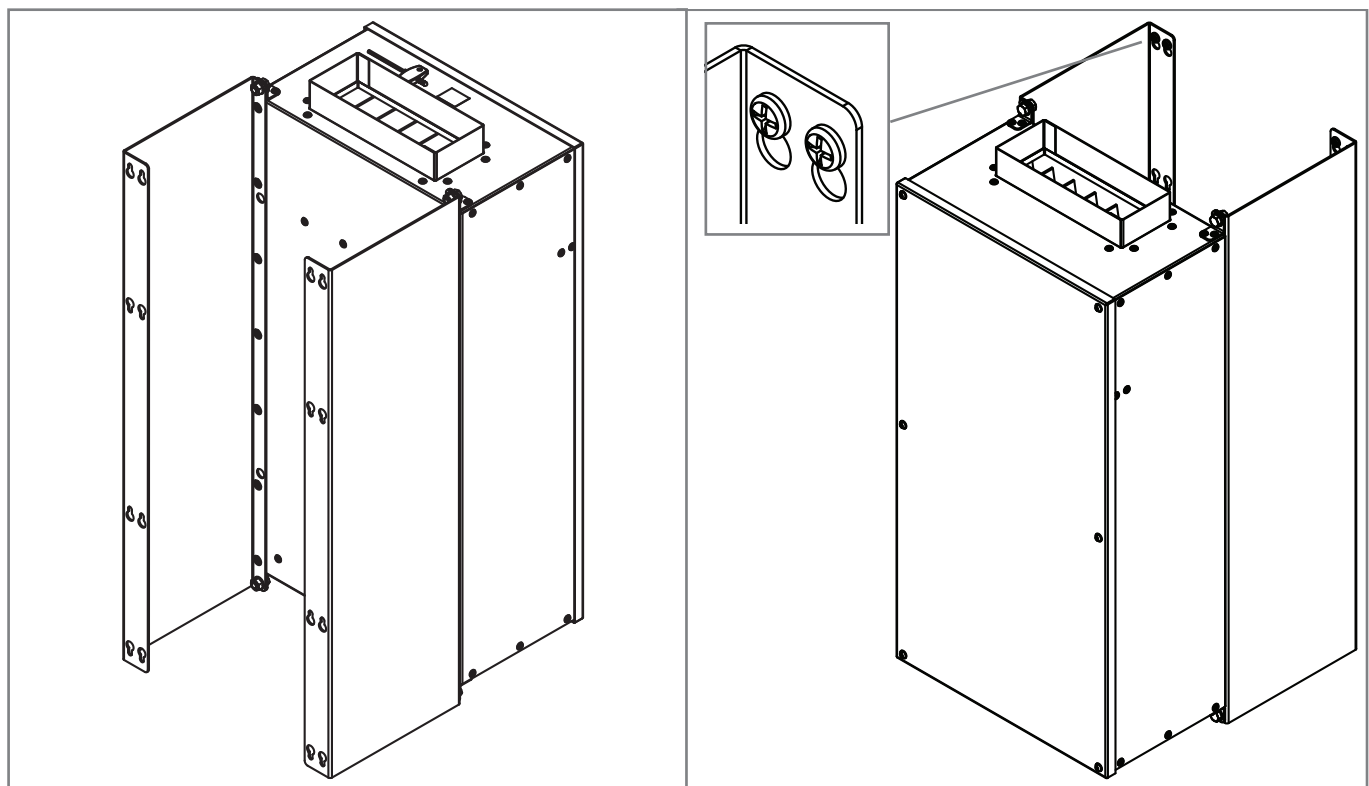
Wall Mounting (Vertical Only) Ducting Behind Unit

1. Attach the mounting brackets to the unit using M8 fixings provided.
2. Mark positions of mounting holes onto wall using dimensions as shown.
3. Prepare the wall in the positions specified for eight $\text{\O}6\text{mm}$ 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.



Fixing Positions

Fixing Screw



Rear

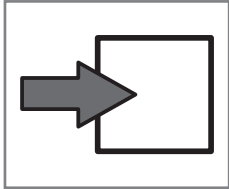
Front

Airflow Direction

The Trimbox Filter® can be supplied with or without a prefilter installed. The air to be filtered must pass through a prefilter before the active carbon filters, therefore if the Trimbox Filter® is supplied without a prefilter it is very important that it is fitted so air supplied to the Trimbox Filter® is from a HRV with integrated filters.

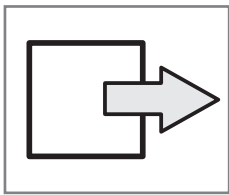
Ducting Connection

The Trimbox Filter® has labels with icons indicating the airflow IN and airflow OUT ports



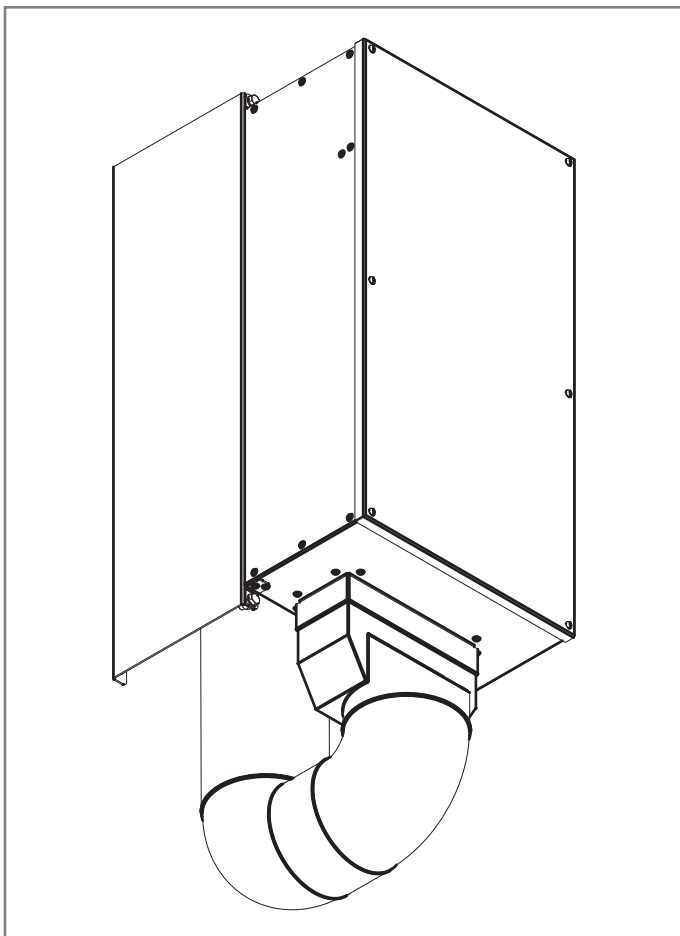
IN

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.



Mounting Ducting Behind Unit

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.

Prefilter

Prefilter, if installed, can be changed by the householder. When changing filter a dust mask of grade P1 or higher should be worn due to the accumulation of dust on the surface of the filter. 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

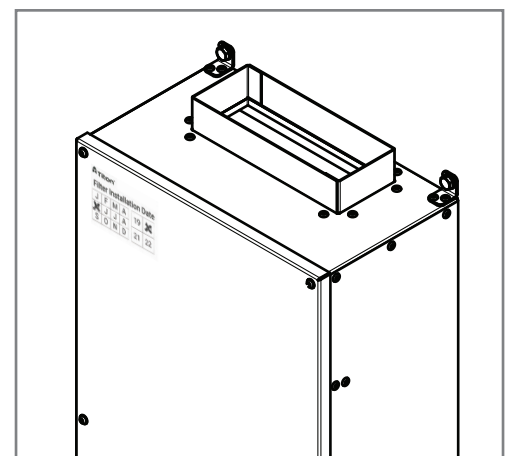
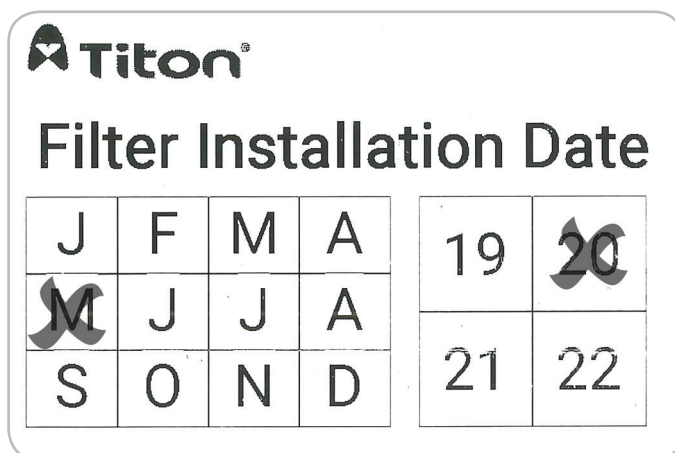
Changing of Active Carbon Filters should be carried out by a competent person using appropriate PPE.

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.

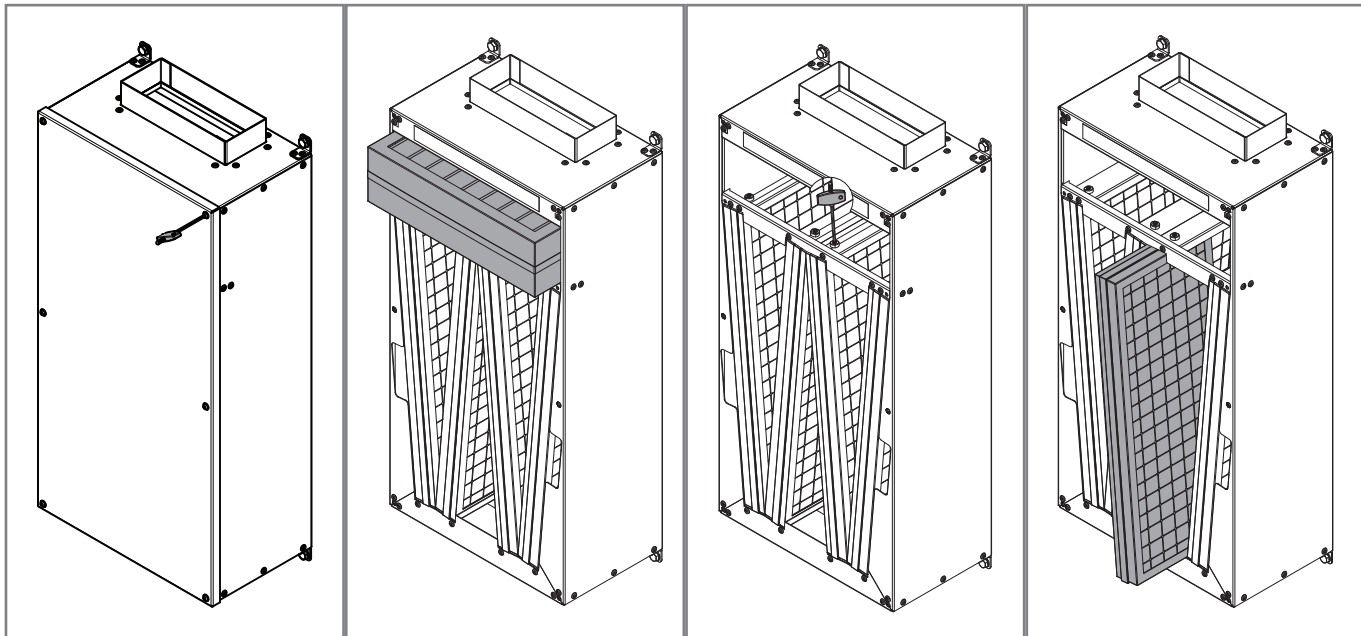
An example of how this should be marked up can be seen below with an installation date of 'MAY'2020'.

An additional installation date label comes loose with the unit which can be applied to a more visible place in cases where the Trimbox 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.



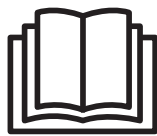
How to Change Filters

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;

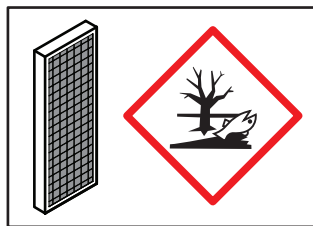


Disposal of Filters

The carbon within the filters are impregnated with chemicals, contact your local civic amenity site or waste recycling centre for disposal.



DO 5463 Iss 01



The Active Carbon Filters are Dangerous for the Environment.

Accessories and Spare Parts List

Removable Insulation Jacket

Titon® can provide a custom designed removable insulation jacket for the Trimbox 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
TP550	XP9910248
TP551	XP9910248
TP552	XP9910305
TP553	XP9910305
TP554	XP9910305
TP555	XP9910305

Filters

Model Part Number	G4 Pre-Filter	F7 Pre-Filter	Active Carbon Filter
TP550	XP2010021	XP2010121	XP2010327
TP551	XP2010021	XP2010121	XP2010328
TP552	XP2010021	XP2010121	XP2010327
TP553	XP2010021	XP2010121	XP2010328
TP554	XP2010021	XP2010121	XP2010327
TP555	XP2010021	XP2010121	XP2010328
TP556	XP2010021	XP2010121	XP2010328
TP557	XP2010021	XP2010121	XP2010328

Fitting Kit

Model Part Number	Ducting Behind Unit Mounting Kit
All Models	TP558

In the event of any queries please contact the system installer.

Ensure this booklet is passed to the householder once installation & commissioning of the ventilation system is complete. This Product Manual must be kept in the Home Information Pack and used as a service record.

Installed by:



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