



Offering extra protection against external NO₂ pollutants

The Titon Trimbox NO₂ Filter[®] reduces Nitrogen Dioxide (NO₂) which is predominately 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 Trimbox NO₂ Filter[®] is an effective means of reducing high NO₂ to an acceptable mean annual concentration level of 40µg/m³.

In addition to outstanding NO₂ reductions, the Titon Trimbox active carbon filters also absorb sulphur dioxide, hydrogen sulphide, hydrogen chloride, ammonia odours, volatile organic compounds and solvents.



Nitrogen dioxide filtration and unit pressure drop

(Based on nitrogen dioxide pre filter concentrations of ≈ 200µg m³)

Airflow rate (l/s)	Filter pressure drop (Pa)	Concentration reduction (%)
Unit One (3 filters)		
29	31	97.6
80.3	134	97.9
Unit Two (4 filters)		
45.3	50	98.1
80.6	106	97.5

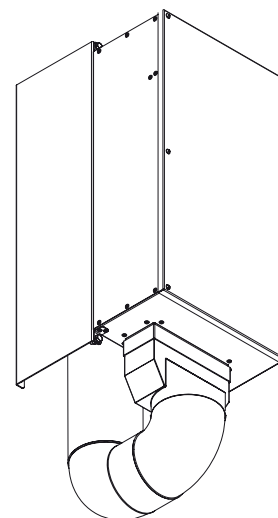
Features & Benefits

- Effective in reducing pollutants in the home, improving Indoor Air Quality (IAQ) and reducing the risk of Toxic Home Syndrome
- Low pressure drop
- Low cost
- Optional ISO ePM1 55% (F7) filter can be installed to further improve indoor air quality
- Independently tested by BRE
- Small compact design
- Compatible with Titon's range of MVHR units
- Fully lined box to reduce duct bound noise and condensation
- The unit can be installed in both intake air and supply ducting
- 98% NO₂ reduction at pre filter concentrations of ≈ 200µg m³
- Effective silencer
- Third party tested for both NO₂ and Acoustic reductions
- ISO Coarse 60% (G4) filter reduces 100% of PM₁₀/35% of PM_{2.5} particles
- ISO ePM1 55% (F7) filter reduces up to 95% of PM_{2.5} particles

Acoustic Data

Independently tested at SRL, report reference C/23276/TO5 to BS EN ISO 7235:2009

Description	Octave Band (Hz)							
	Static Insertion Loss, dB							
	63	125	250	500	1000	2000	4000	8000
Unit One (3 filters)	6.5	7.6	4.9	8.6	16.1	26.8	32.9	36
Unit Two (4 filters)	6.1	6.8	5.6	10	18.5	35.3	35	39.8



Behind unit duct mounting kit available

Product Codes

Unit One:

TP550 220 x 90, **TP552** Ø160, **TP554** Ø150

Unit Two:

TP551 220 x 90, **TP553** Ø160, **TP555** Ø150

Filters:

XP2010121 - ISO ePM1 55% (F7) pre filter (ISO Coarse 60% (G4) standard in units)

Removable insulation jacket:

XP9910248 - 220x90mm ports

XP9910305 - 150 or 160mm ports

TP558 - Behind unit duct mounting kit

Standards

Third party tested for both NO₂ and acoustic reductions based around the standards currently in place for health as specified by the World Health Organisation and the European Union.

Testing references:

COSHH - Workplace exposure limits

COMEAP - Government guidance regarding health of air pollution

WHO - World Health Organisation

Specification

Dimensions: 350mm wide x 690mm high (excluding ports) x 205mm deep

Port Dimension: 220mm x 90mm, Ø150mm, Ø160mm

Weight:

Unit One (3 Filters) - 17 Kg

Unit Two (4 Filters) - 20 Kg

Insulation Jacket - 2.8 Kg

Finish: White Paint

Materials:

Housing: Zintec sheet steel housing, powder coated white.

Internals: Zintec sheet steel.

Pre-Filter: Grade ISO Coarse 60% (G4) synthetic filters as standard, ISO ePM1 55% (F7) optional.

Active Carbon Filter: Honeycomb matrix constructed filter filled with granular active carbon.

Internal Insulation: Closed cell foamed nitrile rubber, class 'O' fire rating.

Duct Ports: Plastic.

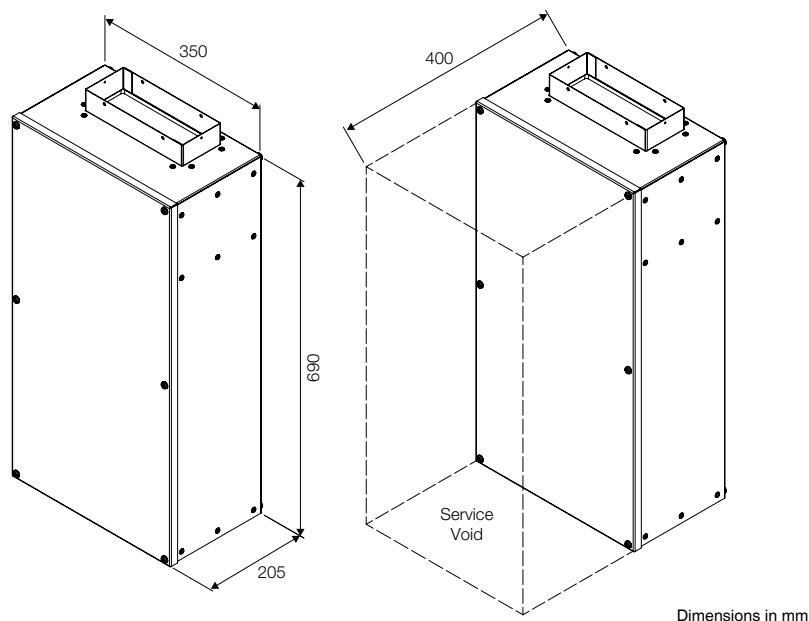
Installation: Install in accordance with regulatory requirements, such as the Domestic Ventilation Compliance Guide (England & Wales) and the Residential Ventilation Association recommendations.

These units can be installed either vertically or horizontally.

Maintenance: Service and filter cleaning/ replacement subject to local environment – see product manual.

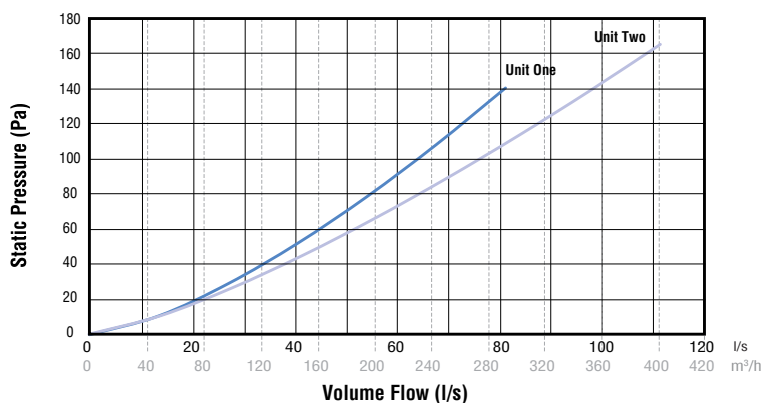
Accessories: Replacement pre-filters and active carbon filters.

Drawing & Dimensions

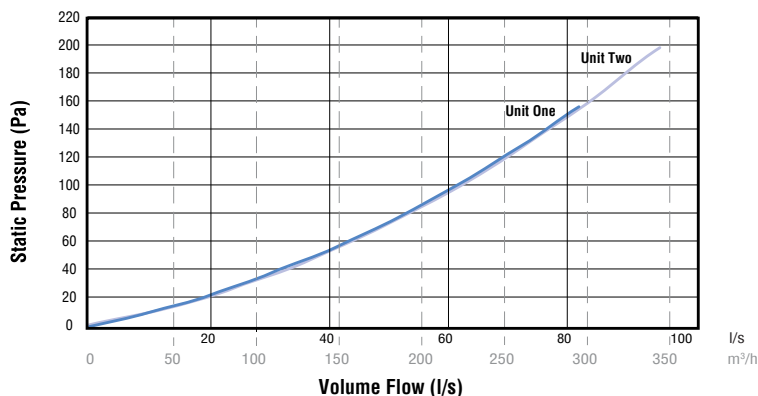


Resistance - Trimbox NO₂ Filter®

ISO Coarse 60% (G4) Prefilter



ISO ePM1 55% (F7) Prefilter



All data is third party tested at BRE and Sound Research Laboratories (SRL) Ltd.