

# Ventilation Systems

## Overview Brochure



# Recommended Residential Ventilation Systems

## Natural ventilation with background ventilators & intermittent extract fans (Formerly system 1)

### Where can it be used?

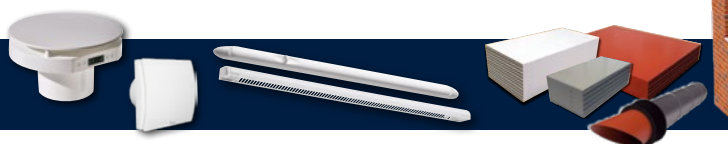
Suitable for 'less air tight dwellings' in new build or refurbishment; houses, flats or apartments with multi façades.

### How does it work?

**Background ventilators (trickle vents in windows)** provide supply ventilation.

**Intermittent extract fans** remove odours and excessive humidity in wet rooms such as kitchen and bathrooms.

### What ventilation products can be used?



Titon Ultimate® (Intermittent option) and TIFC/A range of Intermittent Fans and Trickle Vents



## Continuous mechanical extract ventilation - Decentralised dMEV (Option) (Formerly system 3)

### Where can it be used?

Suitable for new build or refurbishment; houses, flats or apartments, usually in dwellings that are classed as 'highly airtight dwellings' in Part F.

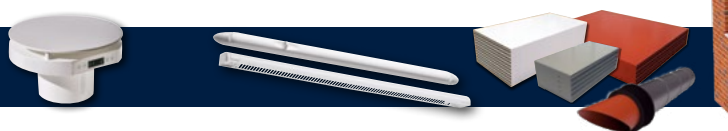
### How does it work?

**Background ventilators (trickle vents in windows)** provide supply ventilation.

**Continuously running decentralised fans** remove odours and excessive humidity in wet rooms such as kitchen and bathrooms.

A boost facility (where applicable) provides rapid extraction when necessary to remove high levels of pollutants.

### What ventilation products can be used?



Titon Ultimate® dMEV and Trickle Vents





## Continuous mechanical extract ventilation - Centralised MEV (Option)

(Formerly system 3)

### Where can it be used?

Suitable for new build; houses, flats or apartments, usually in dwellings that are classed as 'highly airtight dwellings' in Part F.

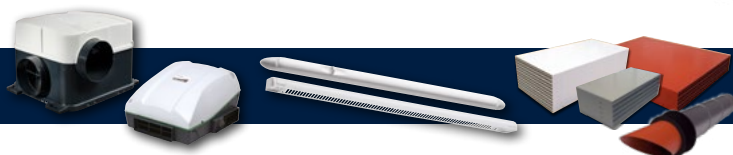
### How does it work?

**Background ventilators (trickle vents in windows)** provide supply ventilation.

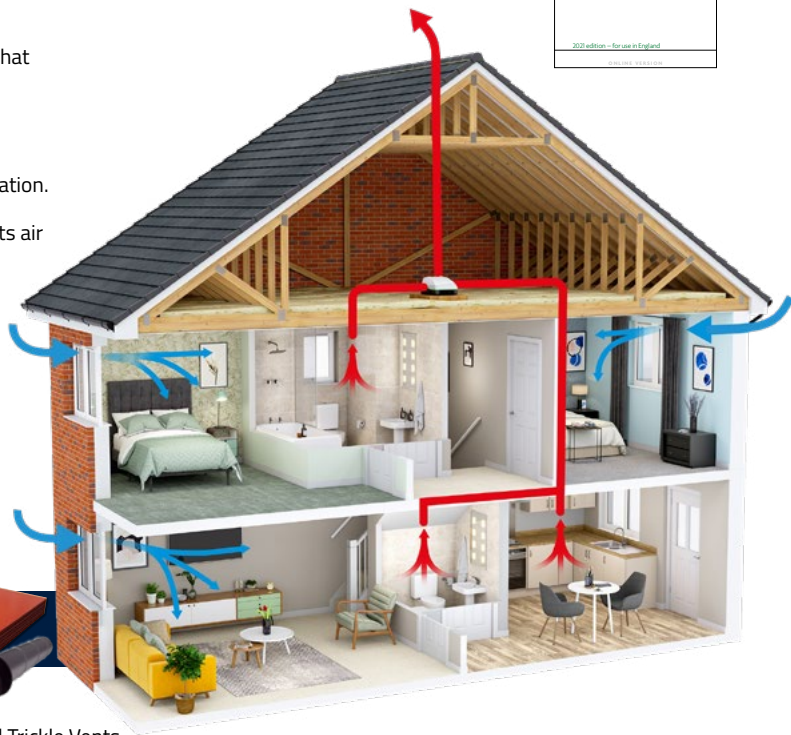
**A centrally located continuously running mechanical extract fan** extracts air via ducts from wet rooms to remove odours and excessive humidity.

A boost facility (where applicable) provides rapid extraction when necessary to remove high levels of pollutants.

### What ventilation products can be used?



CME Q Plus range of Continuous Mechanical Extract Ventilation Fans and Trickle Vents



## Mechanical ventilation with heat recovery - MVHR

(Formerly system 4)

### Where can it be used?

Suitable for new build; houses, flats or apartments, usually in dwellings that are classed as 'highly airtight dwellings' in Part F.

### How does it work?

A mechanical ventilation heat recovery system (MVHR) works by combining **supply** and **extract** air.

Moisture-laden, **stale air is extracted from wet areas**, such as kitchens and bathrooms. The heat from the extract air is recovered by the heat exchanger in the MVHR unit and is recycled by **warming up the supply air** entering a dwelling.

### What ventilation products can be used?



HRV Q Plus range of Mechanical Ventilation Fans



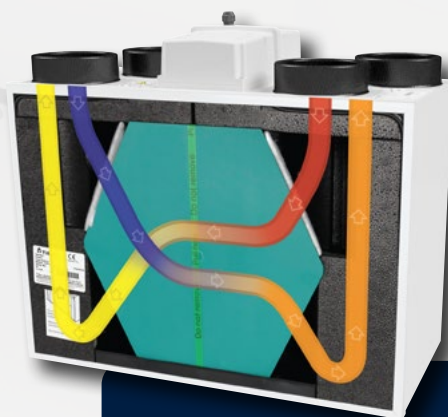
# Mechanical ventilation with heat recovery - MVHR

The HRV Q Plus Eco Range from Titon offers a high capacity continuously running MVHR unit, which is amongst the quietest on the market. Independently tested by the BRE to BS EN 13141 – the only standard specific to the residential sector. There's no need to enclose our MVHR units, the acoustic properties are exceptional.

Combining extremely low power consumption and a highly efficient heat exchanger, these ultra-compact

units also enhance SAP performance via Appendix Q, while remaining versatile enough in size to be installed in either large apartments or small to medium-sized dwellings.

Available in vertical or horizontal format depending on the application requirement, Titon offers a comprehensive range of heat recovery units which aid indoor ventilation to create a healthy and clean air environment.



**First Fix Solutions** are designed to make installation of ducting from the ceiling void to the unit easier and to give a high quality finish. It will help reduce installation time and complete the overall appearance of any installation.

**Duct Covers** are designed to conceal the ducting/silencers from the ports at the top of the unit to the ceiling of the property. The ducting cover also helps reduce ducting breakout noise levels into the room. This both improves the overall appearance of the installation and the noise levels.

**Filter Access** - It's advisable to change your filters every 6-12 months, so easy access is important when replacing old filters. With three panel options available, they offer a quick efficient filter replacement solution.



MANUFACTURED  
DESIGNED AND  
TESTED IN THE **UK**

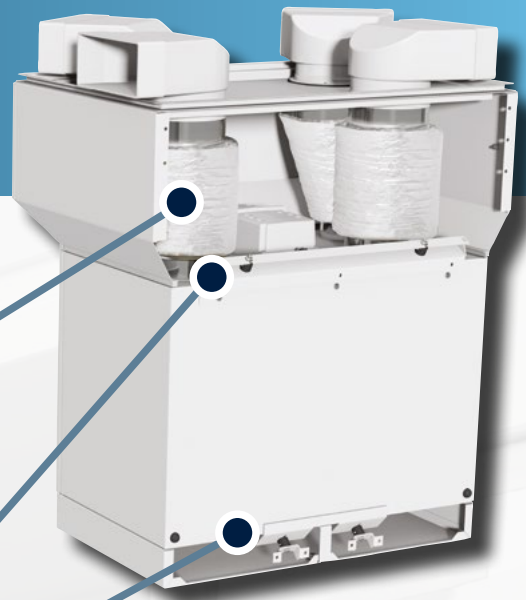
## Benefits & Features

- Specific fan power from 0.38 W/l/s
- Heat recovery up to 92%
- Airflow up to 178 l/s (640 m³/h) at 100 Pa
- High grade filters to protect from external pollutants
- Award winning Trimbox NO<sub>2</sub> Filter® available, to help reduce NO<sub>2</sub> within a MVHR system offering up to 98% reduction with acoustic properties
- Automatic frost protection
- New cooling module option available - HRV Cool Plus™
- Accepts either 204mm x 60mm rectangular ducting, 150mm or 160mm diameter ducting, no adaptors required Setback speed and continuous speed
- Summer bypass
- Extensive range of controls; aura-t™, auramode®, aurastat® and auralite® status indicator
- Sensors available; Humidity, CO<sub>2</sub>, Temperature & Air Quality
- Zintec sheet steel or expanded polypropylene casings
- SAP Q tested to EN 13141-7

## Sound Attenuator – Semi Flexible Ducting

Titon's Semi Flexible Sound Attenuators consists of a strong multiple layered corrugated perforated aluminium inner duct with an aluminium/polyester laminated outer jacket. The space between the inner and outer duct is filled with 25mm sound absorbing material which is protected by a vapour barrier.

The duct is fitted with galvanised metal sleeves at both ends to fit to duct work – female spigots for direct connection to MVHR or duct connectors.



**Anti-Vibration/AV Mounting\*** kits that have been specifically designed to isolate the unit from the wall to further reduce any low levels of vibration induced noise from being transmitted to the mounting structure.

\*Units will be despatched with standard mounting brackets if no AV option is selected.

**aura-t™ Controllers** are Titon's new touchscreen controller and are available to be mounted on-board HRV Q Plus units. Allowing simple and straight forward control and commissioning, the aura-t™ allows total control over your unit.

**Condensate Drain Covers** are designed to conceal the service pipe attached to the underside of Titon HRV units to improve overall appearance.



- Additional duct heater option available
- Ideal for residential and commercial properties
- Extremely low running, resulting in low noise levels due to high quality casing and insulation
- Silencer attenuators available to assist in noise control
- On board aura-t™ capabilities
- 3 filter door options
- Intelligent controller, quick and easy to commission




**Mechanical ventilation with heat recovery (MVHR)**  
(Formerly system 4)



# Mechanical ventilation with heat recovery - MVHR

## HRV Q Plus Range

<b>MVHR</b> Comparison Chart	  			
	HRV1.25 Q Plus	HRV1.3 Q Plus	HRV1.35 Q Plus	HRV1.6 Q Plus
Width	600mm	600mm	600mm	600mm
Height excl. Ports	430mm	430mm	430mm	505mm
Depth	285mm	285mm	285mm	353mm
Depth incl. Mounting Bracket	295mm	295mm	295mm	363mm
Airflow (l/s) at 100Pa	44	58	60	100
Heat Recovery % (up to)	88%	88%	88%	89%
Specific Fan Power (down to)	0.59 W/l/s	0.65 W/l/s	0.65 W/l/s	0.49 W/l/s
Housing	Zintec Sheet Steel	Zintec Sheet Steel	Zintec Sheet Steel	Zintec Sheet Steel
Weight	16kg	16kg	16kg	22kg
Filters	ISO Coarse 55% (G3)	ISO Coarse 55% (G3)	ISO Coarse 55% (G3)	ISO Coarse 55% (G3)
Maximum No. Wet Rooms	Kitchen + 4	Kitchen + 6	Kitchen + 6	Kitchen + 7
Maximum Floor Area (m <sup>2</sup> ) (<5)*	60	100	100	120
Sound Levels dBA**	23	26	29	24
Energy Rating	A	A	A	A+
Available with Summer Bypass	Y	Y	Y	Y
Available with SUMMER boost®	Y	Y	Y	Y
On-board aura-t™ option available	Y	Y	Y	Y

Product features include Intelligent Humidity Control, Boost, Summer Bypass, SUMMERboost® and Duct Heater Control options.

\* Based on the unit running at 65% capacity assuming typical system resistances and using ducting equal to the spigot diameter. Unit selection will also be dependant on system design.

\*\* Breakout sound pressure level at 3m hemispheric at 53% of max flow.

## Controls and Switches

### aura-t™ SMART (WiFi)

The aura-t™ SMART (WiFi) touch-screen controller that allows straightforward operation of ventilation speeds. Offering WiFi connection via Titon's auraSMART® app.



### aura-t™ B and HMB



Is a simple yet powerful touch-screen LCD display for programming, commissioning and occupancy with on board capabilities.



### auraSMART® - app

Has user friendly interface for easy monitoring of your system. Ideal for commissioning to guide the install process. The auraSMART® app can cater for it all.



	 <b>NEW PRODUCT</b>	 <b>NEW PRODUCT</b>		
HRV1.65 Q Plus	HRV4 Q Plus	HRV4.25 Q Plus	HRV20 HE Q Plus	H200 Q Plus
600mm	600mm	600mm	752mm	600mm
505mm	602mm	602mm	708mm	200mm
353mm	477mm	477mm	533mm	1000mm
363mm	487mm	487mm	549mm	-
96	118	158	178	83
89%	91%	91%	92%	83%
0.43 W/l/s	0.38 W/l/s	0.43 W/l/s	0.48 W/l/s	0.55 W/l/s
Zintec Sheet Steel	Zintec Sheet Steel	Zintec Sheet Steel	Zintec Sheet Steel	Zintec Sheet Steel
22kg	28.5 kg	28.5 kg	46kg	32kg
ISO Coarse 55% (G3)	ISO Coarse 85% (G4)	ISO Coarse 85% (G4)	ISO Coarse 65% (G4)	ISO Coarse 60% (G4)
Kitchen + 7	Kitchen + 7	Kitchen + 7	Kitchen + 7	Kitchen + 7
120	180	220	290	150
31	26	32	35	31
A	A+	A	A+	A
Y	Y	Y	Y	Y
Y	Y	Y	Y	Y
Y	Fitted as standard (B2 Model)	Fitted as standard (B2 Model)	Fitted as standard	N

**MANUFACTURED  
DESIGNED AND  
TESTED IN THE** **UK**

#### 3 Speed Switch

A low voltage switch to change between setback, continuous or boost running speeds. The switch is wired to but sited remotely from the HRV unit.



#### Humidistat

Set to put the unit in boost when a predefined level of relative humidity is met. Wired to, but sited remotely from the HRV unit.



#### aura-t™ on-board

Titon's aura-t™ is now available to be mounted within a HRV unit. This is an optional extra

HRV 4 B2 model and 20 HE Q Plus model fitted as standard.



# Continuous mechanical extract ventilation - Decentralised dMEV

The Titon Ultimate® dMEV decentralised mechanical extract fan meets all of the new performance requirements. It provides extremely low noise levels, as low as 10 dB(A) and has exceptional airflow performance; it is the ultimate fan.

With adjustable continuous and boost speed settings available, the Titon Ultimate® dMEV utilises an efficient DC motor and incorporates a uniquely designed impeller/guide vane combination to produce high flow rates and pressure.

The Titon Ultimate® dMEV uses a boost overrun and boost delay timer that is adjustable between 0 – 60 minutes and comes with an intermittent option, giving more flexibility.

The social housing version (humidity control with/without data logging) is the perfect solution for landlords who want to make sure that mould and condensation are not a constant problem. Combined with a built in lock out button for installers/landlords to stop settings being modified that could affect the ventilation rates.

The Titon Ultimate® dMEV is easy to maintain, simple to monitor using its unique data logging facility/app and can be commissioned in minutes.



MANUFACTURED  
DESIGNED AND  
TESTED IN THE **UK**



## Benefits & Features

- PCDB listed for inclusion within SAP
- Low specific fan power down to 0.11 W/l/s
- Airflow up to 30 l/s (108 m³/h)
- Extremely low running costs
- 3 configurable speed options (Trickle, Boost and High Boost)
- Eligible for Energy Compliance Obligation (ECO) fourth iteration funding
- Constant flow technology designed to run continuously (24/7)
- 4 button & LED display to allow for simple control
- l/s and m³/h flow display options
- Intermittent function available
- Integral pressure sensor to maintain constant flow to overcome external back pressures of up to 20Pa
- Unit running time and average RH Data Logging
- Fast straightforward commissioning and set up
- Low profile aesthetic circular design



Low profile with aesthetic circular design



Unique high performance impeller and guide vane design



CFC Ceiling Fan Cuff available.  
Independently tested to BS EN 1364-2:  
2018 Fire Resistance Tests for non-load  
bearing elements – Part 2: Ceilings and  
additional guidance from BS EN 1366-3:  
2009. (Test Report 510322B/R). Up to 60  
minutes integrity and insulation

- Ideal for removing condensation which can lead to mould and ill health
- Lock out button for installers
- Humidity control suspend timer
- IPX4 rated (Ceiling mounted TP646 Kit required)
- Double insulated (requires no earth)
- Designed and manufactured in accordance with EN60335-2-80 Low Voltage Directive and the EMC Directive (Electromagnetic Compatibility)



**Continuous mechanical extract ventilation - dMEV**  
(Formerly system 3)

# Continuous mechanical extract ventilation - Centralised MEV

An MEV or CME (Continuous Mechanical Extract Ventilation) system uses background ventilators, usually trickle ventilators fitted in windows and a centrally located continuously running mechanical extract fan with ducts running from the moisture producing areas or "wet rooms" such as kitchens and bathrooms.

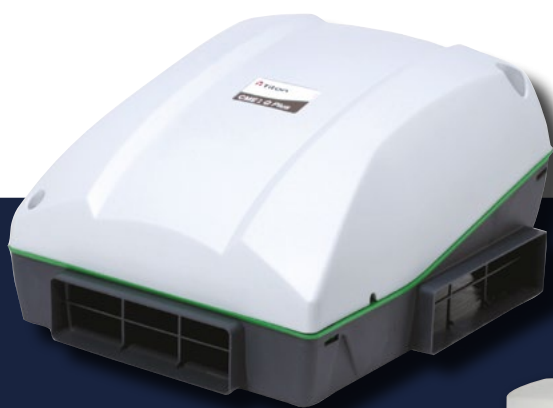
The background ventilators provide the whole building ventilation and the central mechanical extract fan runs continuously to remove odours and excessive humidity.

A boost facility provides rapid extraction when necessary to remove higher levels of pollutants.

The CME Q Plus range of fans are ideal for continuous extract of stale, damp and polluted air to the outside environment. With a combination of aesthetic smooth lines, unique tilted impeller, single level or circular ports it provides the ideal solution for hidden ceiling installation in flats and apartments.

Easy and straightforward to commission, the CME Q Plus will help protect against condensation and mould within a home.

MANUFACTURED  
DESIGNED AND  
TESTED IN THE **UK**



CME2/2.1 Q Plus



CME3/3.1 Q Plus



## Benefits & Features

- High energy efficiency levels, via Electronically Commutated (EC) motor
- Very low power consumption/specific fan power
- Compact – unit is small and low in profile, can be fitted in airing cupboards, cupboards or loft spaces
- Easy installation due to innovative sub-assembly and unique packaging design
- Low unit noise

- Can be mounted on any plane
- Wide duty range
- Demand control ventilation ready
- Quick and easy commissioning
- Available in volt free and switch live inputs
- For use in conjunction with Titon trickle vents
- Unit can be cleaned and serviced without disturbing ducting

### CME2/2.1 Q Plus



- Airflow up to 137 l/s (493 m<sup>3</sup>/h) at 100 Pa
- Optional two part installation
- Performs to high levels through rectangular ports; does away with need for round to rectangular adaptors, saving cost, reducing joints and installation time
- Optional adjustable humidity sensor (between 55% RH & 85% RH) triggers boost speed proportionally
- Duct ports on one level, lessening need for unnecessary bends in ducting, saving cost, reducing joints and installation time

- Ideal for central mechanical ventilation in refurbishment of single floor dwellings where there is only space for rectangular ducting
- Fully adjustable boost overrun timer 0-30 minutes
- Can accept either 204mm x 60mm (standard) or 110mm x 54mm ducting (using provided converter)
- Original enclosure design with 204mm x 60mm spigots on one level, ideal for low profile ceiling mounting

### CME3/3.1 Q Plus



- Airflow up to 128 l/s (461 m<sup>3</sup>/h) at 100 Pa
- Optional adjustable humidity sensor (between 55% RH & 85% RH) increases unit speed proportionally
- Fully adjustable boost overrun timer 0-30 minutes
- Can accept either Ø125 and/or Ø100 ducting

First fix install option



Spigot converter



Continuous mechanical extract ventilation - MEV  
(Formerly system 3)



# Introducing the new HRV Cool Plus™

## Offering protection against overheating

Overheating in homes can also pose various risks, including heat stress, dehydration, an increase of health conditions. It is estimated over 4,500 people died in the UK in 2022 due to high temperatures, the largest on record in recent years.

Effective ventilation systems, such as mechanical or natural ventilation are essential in alleviating overheating by promoting air circulation and cooling indoor space. They also remove indoor air pollutants, excess moisture and unpleasant odours.

Titon's HRV Cool Plus™ is engineered to seamlessly integrate into heat recovery ventilation (MVHR) systems, delivering cooling and filtered air to enhance user comfort. With its integrated cooling module, the cutting-edge unit pre-cools incoming fresh air during warmer months, ensuring a comfortable indoor environment.

Providing up to 3.3kW total cooling capacity (subject to volume flow and relative humidity), it ensures optimal performance even in demanding conditions, and with two mounting options available: either wall or floor mounting, it offers flexibility to suit any installation requirement.



### Benefits & Features

- Up to 3.3 kW total cooling (subject to volume flow and relative humidity)
- Available for wall mounting or floor mounting. When using the wall bracket the supporting wall must be suitable for the combined weight of the cooler, MVHR, bracket assembly. (100 kg wall mounted / 106 kg floor mounted)
- Heat cell will provide cooling assistance to pre-chill incoming fresh air when in operation exactly as it does normally with heat
- Minimal maintenance of fully sealed refrigerant heat pump with coil & fin heat exchangers. Similar to a fridge or freezer. Proven & reliable. Refrigerant is R407c (GWP 1774)
- Installation below the ceiling in the heated space but compact enough to permit the location of a washing machine below
- Port sizes 160mm

MANUFACTURED  
DESIGNED AND  
TESTED IN THE **UK**

### Operation Cycle

- Pre-set temperature inside the dwelling is reached
- MVHR increased speed to cooler boost
- Once achieved the cooler will start
- Pre-set tempered internal temperature reached
- Cooler will deactivate
- MVHR decreased to continuous levels

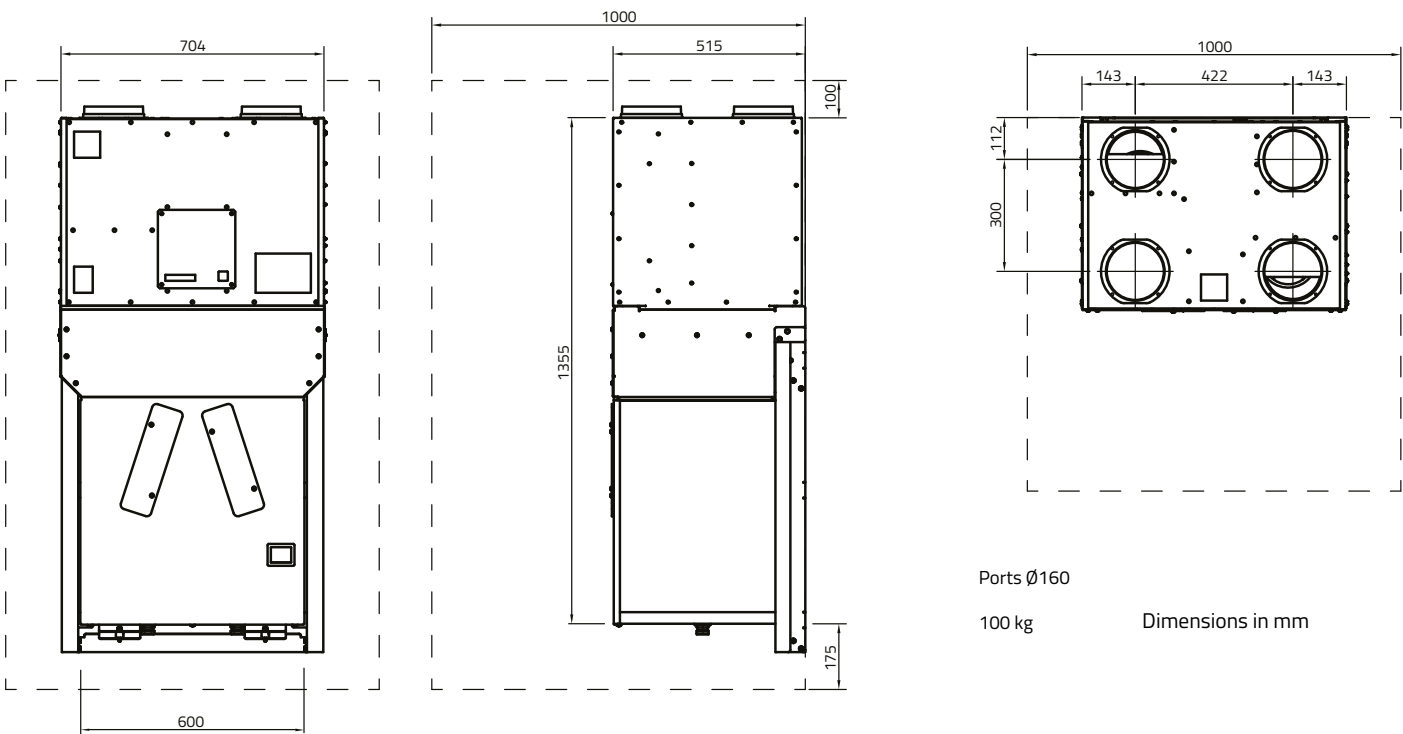
### Additional Controls

- Optional manual mode via the onboard aura-t™
- Minimum atmosphere temperature controls to ensure the cooler does not operate with the dwelling heating system
- Cooler can be deactivated via the thermostat and/or onboard aura-t™

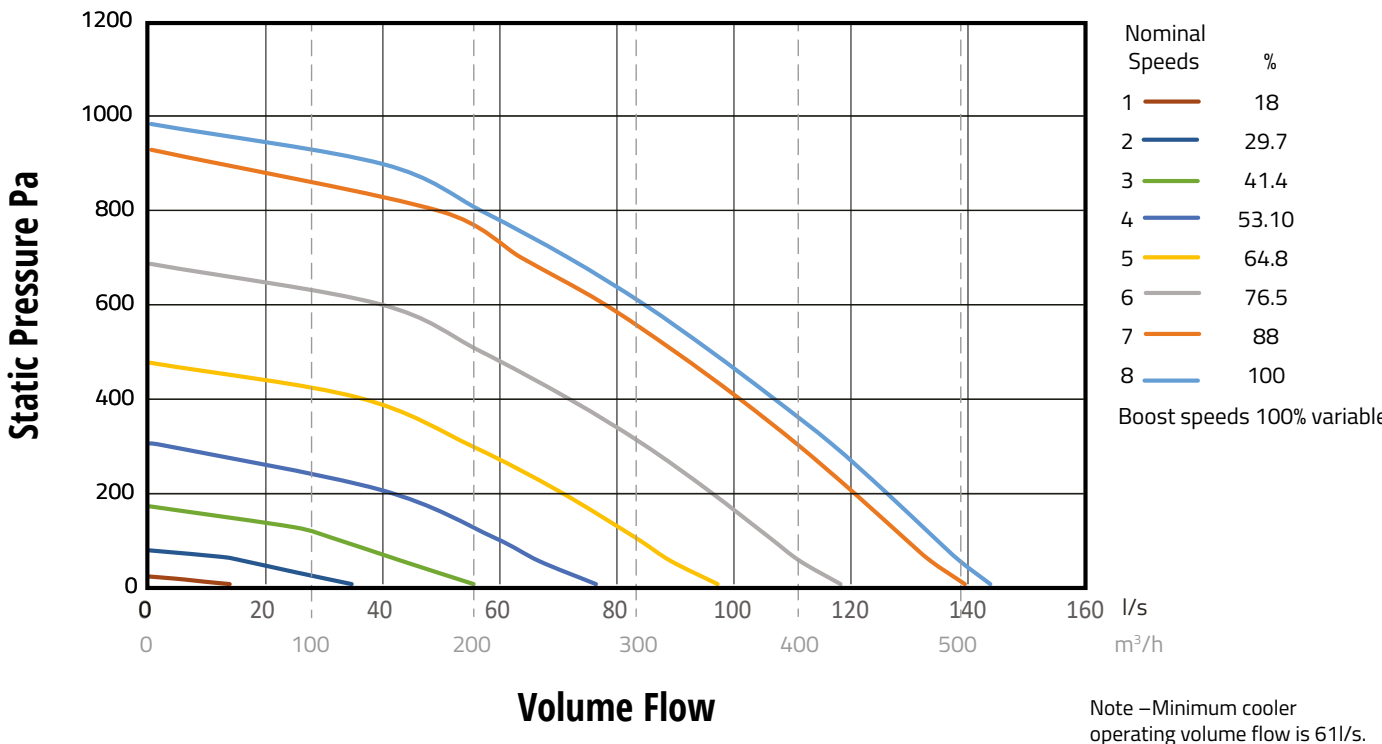
### How It Works

- Thermostat in cooling mode
- MVHR atmospheric temperature sensing
- Sufficient airflow for cooling operation automatically set by our controls
- Internal pressure sensors ensure cooler operates only when sufficient airflow is maintained
- Active communication between MVHR and Cooler

Drawing and Dimensions



Air Performance



# Introducing the new HRV Cool Plus™

## Preliminary Tempering Performance

### db 29 wb 21.2 - External Air Temperature

Conditions	Cooling (kW) / Airflow Rates (l/s)	60	70	80	90	100	110	120
23°C Internal	Combined Total kW	1.8	1.9	2.1	2.3	2.4	2.6	2.7
	Combined Sensible kW	1.3	1.4	1.6	1.7	1.9	2.0	2.1
	Supply Air °C	11.6	12.2	12.7	13.1	13.5	13.9	14.2
24°C Internal	Combined Total kW	1.7	1.9	2.0	2.2	2.3	2.5	2.6
	Combined Sensible kW	1.2	1.4	1.5	1.7	1.8	2.0	2.1
	Supply Air °C	12.0	12.5	13.0	13.4	13.8	14.2	14.5
25°C Internal	Combined Total kW	1.6	1.8	2.0	2.1	2.2	2.4	2.5
	Combined Sensible kW	1.2	1.4	1.5	1.7	1.8	1.9	2.1
	Supply Air °C	12.3	12.9	13.4	13.8	14.2	14.5	14.8
26°C Internal	Combined Total kW	1.6	1.7	1.9	2.0	2.1	2.3	2.4
	Combined Sensible kW	1.2	1.3	1.5	1.6	1.7	1.9	2.0
	Supply Air °C	12.7	13.2	13.7	14.1	14.5	14.8	15.1

### db 32 wb 23.7 - External Air Temperature

Conditions	Cooling (kW) / Airflow Rates (l/s)	60	70	80	90	100	110	120
23°C Internal	Combined Total kW	1.9	2.2	2.4	2.6	2.7	2.9	3.1
	Combined Sensible kW	1.3	1.5	1.7	1.8	2.0	2.1	2.3
	Supply Air °C	14.0	14.4	14.9	15.3	15.6	15.9	16.2
24°C Internal	Combined Total kW	1.9	2.1	2.3	2.5	2.6	2.8	3.0
	Combined Sensible kW	1.3	1.5	1.6	1.8	1.9	2.1	2.2
	Supply Air °C	14.3	14.8	15.2	15.6	15.9	16.2	16.5
25°C Internal	Combined Total kW	1.8	2.0	2.2	2.4	2.5	2.7	2.8
	Combined Sensible kW	1.3	1.4	1.6	1.7	1.9	2.0	2.2
	Supply Air °C	14.6	15.1	15.5	15.9	16.2	16.5	16.8
26°C Internal	Combined Total kW	1.8	2.0	2.1	2.3	2.5	2.6	2.7
	Combined Sensible kW	1.2	1.4	1.6	1.7	1.9	2.0	2.2
	Supply Air °C	15.0	15.4	15.8	16.2	16.5	16.8	17.1

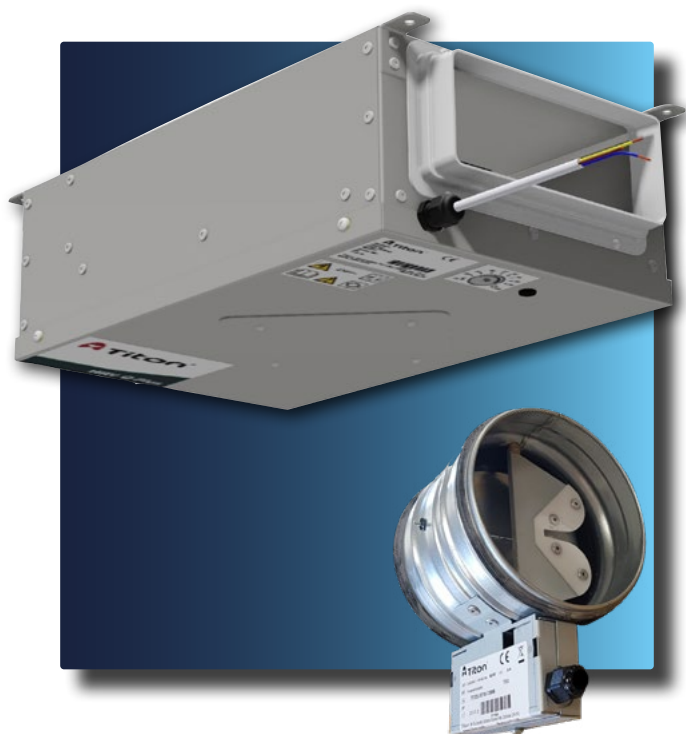
### db 34 wb 25.3 - External Air Temperature

Conditions	Cooling (kW) / Airflow Rates (l/s)	60	70	80	90	100	110	120
23°C Internal	Combined Total kW	2.0	2.3	2.5	2.7	2.9	3.1	3.3
	Combined Sensible kW	1.3	1.5	1.7	1.9	2.0	2.2	2.4
	Supply Air °C	15.5	16.0	16.4	16.7	17.1	17.4	17.6
24°C Internal	Combined Total kW	2.0	2.2	2.4	2.7	2.8	3.0	3.2
	Combined Sensible kW	1.3	1.5	1.7	1.8	2.0	2.2	2.3
	Supply Air °C	15.9	16.3	16.7	17.0	17.4	17.6	17.9
25°C Internal	Combined Total kW	1.9	2.2	2.4	2.6	2.8	2.9	3.1
	Combined Sensible kW	1.3	1.5	1.6	1.8	2.0	2.1	2.3
	Supply Air °C	16.2	16.6	17.0	17.3	17.6	17.9	18.2
26°C Internal	Combined Total kW	1.9	2.1	2.3	2.5	2.7	2.8	3.0
	Combined Sensible kW	1.3	1.4	1.6	1.8	1.9	2.1	2.2
	Supply Air °C	16.6	16.9	17.3	17.6	17.9	18.2	18.5

The combined total kW cooling accounted for coolth recovery, sensible and latent cooling. These results therefore reflect expected cooling power and supply air temperatures when in operation. For cooling output data based on your assumed external design conditions, please consult Titon.



# Purge Ventilation and Ducting Offering



## Purge Ventilation Unit

Titon's Purge ventilation unit is ideal to support Building Regulations Part F and Part O, addressing Ventilation and Overheating. It allows the rapid removal of stale, odorous and poor quality air from the dwelling allowing a healthier more comfortable environment to be reinstated.

The unit can be used in an independent purge system in its own right or integrated into our own HRV Q Plus MVHR system to provide additional dedicated purge ventilation.

- Low Profile
- High efficiency EC fan
- 100% variable speed control for commissioning set point
- 90° configurable option
- Accepts configurations of 220x90mm rectangular ducting and Ø150mm or 220x90mm with adaptor for 90° option
- For use in rooms up to 45m<sup>2</sup>
- In line configurable option
- Simple 1 setting setup
- Light weight for easy handling
- Easy and quick to install
- Low sound levels
- IPX2 water resistant
- Using ducting or duct accessories from other sources may compromise system performance



## Rigid, Semi Rigid & Self-Seal Thermal Ducting

Titon offers a comprehensive range of ducting and terminals to complement our products and we advise you ensure the appropriate components are selected in accordance with Regulatory, Best Practice and SAP Q requirements.

Titon offering includes;

- Rigid Ducting  
(Ø100 Ø125, Ø150, 110x54, 204x60 & 220x90)
- Thermal Ducting  
(Ø125 Ø160, Ø150, 204x60 & 220x90)
- Semi-flexible Ducting  
(Ø92mm & Ø75mm)

Each offering its own unique features to help with optimum performance.

Comprehensive advice is available from Titon on request.

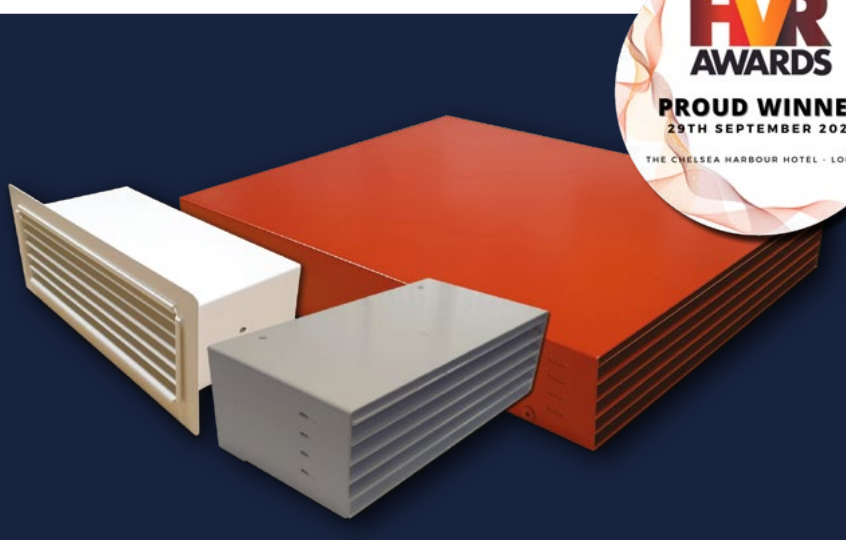
Using ducting or duct accessories from other sources may compromise system performance.

# Titon FireSafe® Range

## Single Air Brick

The award winning Titon FireSafe® Air Brick Range is a unique high flow terminal designed for powered ventilation systems offering low resistance to airflow, but high resistance to fire as set out in Approved Document B (fire safety) volume 1: Dwellings, 2019 edition. Constructed from sheet steel (A1) and polyester powder coated to classification A2-s1, d0.

The Titon FireSafe® Air Brick is designed to be built into external wall types during construction. The range consists of short and long versions and can easily be connected to both 204x60 and 220x90 rectangular ducting.



## Benefits & Features

- Polyester Powder Coating meeting EN13501-1 classification A2-s1,d0
- Material 1mm Electrogalvanized Sheet Steel, fire class A1 'no contribution to fire'
- Equivalent to many brick sized grilles and additional brick and half size option
- Designed for both 204x60 & 220x90 ducting
- Bezelled version for use with exterior cladding instead of brickwork
- Complies with the latest standard as set out in Approved Document B (fire safety) volume 1: Dwellings, 2019 edition
- High flow terminal designed for powered ventilation systems offering low resistance to airflow and high resistance to fire
- Extensive versatile range for different installation options
- Registered Design
- Also available in Double brick (204x128) option
- Special paint finishes available depending on quantity
- Performance tested to BS EN13141-2:2010
- Corrosion resistance - salt spray tested to BS EN ISO 9227:2012
- Optional lengths available at request
- Compatible with thermal and rigid ducting

## Specification

### Materials:

Steel Electrolytically Zinc Coated (BS EN 10152 DC01 ZE25/25)

### Paint:

Powder Coated (A2-s1, d0 classification to EN 13501-1)

### Registered Design

TA360 - Registered Design No 6067647  
TA370 - Registered Design No 6067645  
TA380 - Registered Design No 6067648  
TA390 - Registered Design No 6067646  
TA392 - Registered Design No 6067646

### Installation:

Install in accordance with Residential Ventilation Association Good Practice recommendations – details on request.

Maintenance: Wipe with a damp cloth and remove any blockages on a regular basis.

**Finishes:** Terracotta, Sand, Grey, White or Brown

**Colour Reference** (add to end of part number)

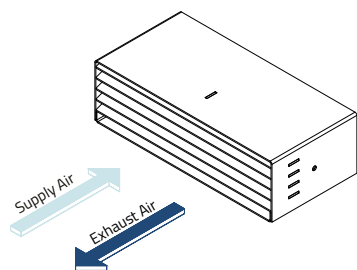
/023 - Brown (Semigloss RAL 8017)  
/086 - Terracotta (Matt RAL 8004)  
/151 - White (Matt RAL 9010)  
/397 - Grey (Matt RAL 7012)  
/626 - Sand (Matt RAL 1001)

### Free Area:

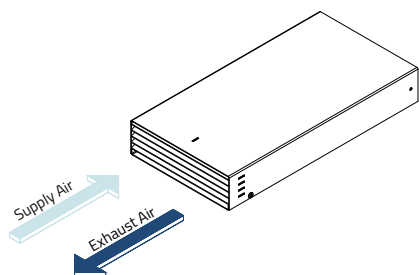
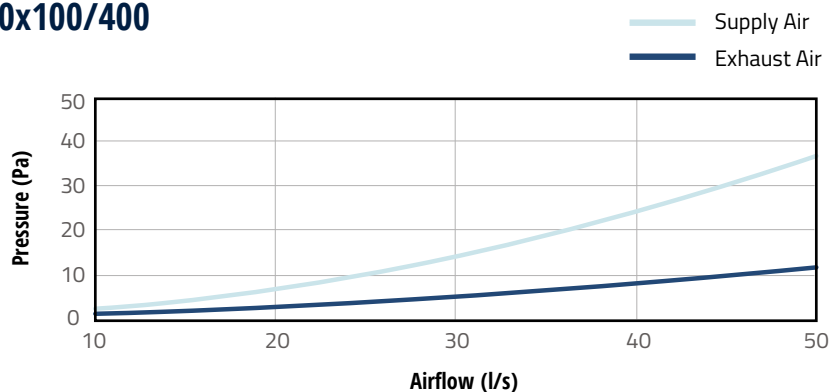
Small Air Bricks  
TA360, TA361, TA370 & TA371  
Titon FireSafe® Air Brick AAO = 10089 mm²

Large Air Bricks  
TA380, TA381, TA390, TA391, TA392 & TA393  
Titon FireSafe® Air Brick AAO = 16060 mm²

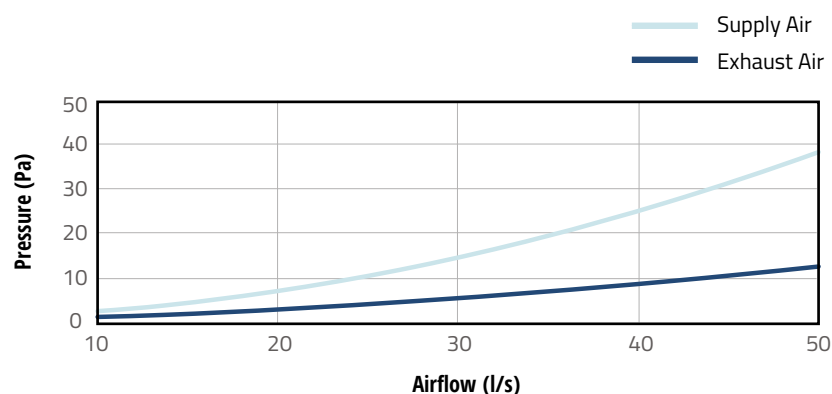
## High Flow Terminal Resistance - 204x60x100/400



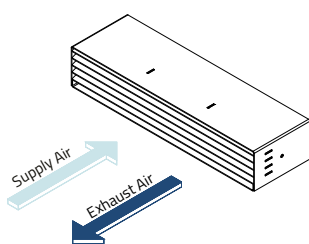
**TA360** - Titon FireSafe® Air Brick 204x60x100/  
**TA361** - Titon FireSafe® Air Brick 204x60x100 Bezelled



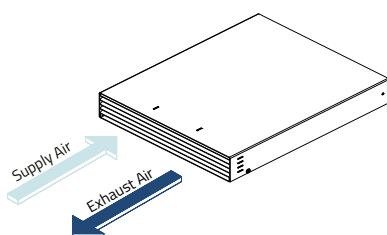
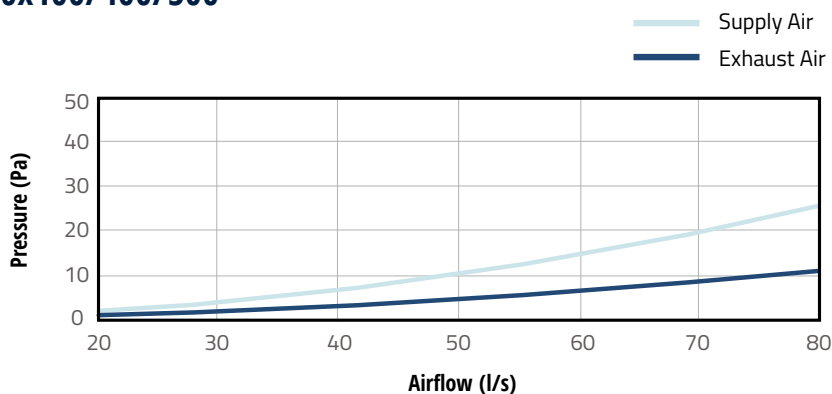
**TA370** - Titon FireSafe® Air Brick 204x60x400/  
**TA371** - Titon FireSafe® Air Brick 204x60x400 Bezelled



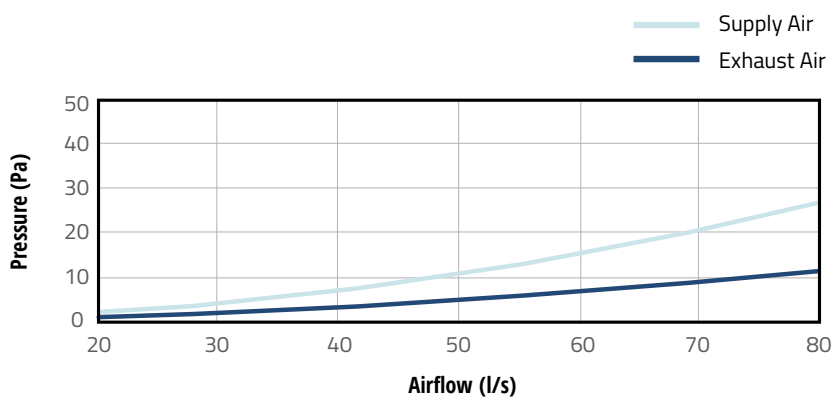
## High Flow Terminal Resistance - 330x60x100/400/500



**TA380** - Titon FireSafe® Air Brick 330x60x100/  
**TA381** - Titon FireSafe® Air Brick 330x60x100 Bezelled



**TA390** - Titon FireSafe® Air Brick 330x60x400/  
**TA391** - Titon FireSafe® Air Brick 330x60x400 Bezelled  
**TA392** - Titon FireSafe® Air Brick 330x60x500/  
**TA393** - Titon FireSafe® Air Brick 330x60x500 Bezelled





# Titon FireSafe® Range

## Double Air Brick

The new Titon FireSafe® Air Brick Range is a unique high flow terminal designed for powered ventilation systems offering low resistance to airflow, but high resistance to fire as set out in Approved Document B (fire safety) volume 1: Dwellings, 2019 edition. Constructed from sheet steel (A1) and polyester powder coated to classification A2-s1, d0.

The Titon FireSafe® Air Brick is designed to be built into external wall types during construction. The range consists of short and long versions and can easily be connected to 220x90 rectangular ducting.



## 100mm Push Through Wall Kit

The new Titon FireSafe® 100mm Push Through Wall Kit is a circular high flow terminal designed for powered ventilation systems offering low resistance to airflow, but high resistance to fire as set out in Approved Document B (fire safety) volume 1: Dwellings, 2019 edition.

Ideal for new build, refurbishment and social housing residential applications, it is constructed from sheet steel (A1) and polyester powder coated to classification A2-s1, d0.

Titon FireSafe® 100mm Push Through Wall Kit is designed to be installed from the inside of the dwelling and will create a seal to the external wall. The range consists of a Ø100 round version at 630mm long.

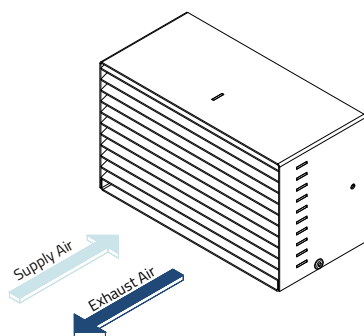
## Benefits & Features

- Polyester Powder Coating meeting EN13501-1 classification A2-s1,d0
- Material 1mm Electrogalvanized Sheet Steel, fire class A1 'no contribution to fire'
- Designed for 220x90 ducting
- Bezelled version for use with exterior cladding instead of brickwork
- Complies with the latest standard as set out in Approved Document B (fire safety) volume 1: Dwellings, 2019 edition
- High flow terminal designed for powered ventilation systems offering low resistance to airflow and high resistance to fire
- Extensive versatile range for different installation options
- Registered Design
- Also available in Single brick (204x60 and 330x60) options
- Special paint finishes available depending on quantity
- Performance tested to BS EN13141-2:2010
- Corrosion resistance - salt spray tested to BS EN ISO 9227:2012
- Optional lengths available at request
- Compatible with thermal and rigid ducting

## Benefits & Features

- Material 0.6 – 1.0mm hot dipped galvanised sheet, fire class A1 'no contribution to fire'
- Polyester powder coating meeting EN13501-1 classification A2-s1,d0
- Ideal for retrofit where mould and condensation are a major problem
- Designed for installation with Titon Ultimate® dMEV
- Can be cut to desired wall thickness
- Performance tested to BS EN13141-2:2010
- Corrosion resistance - salt spray tested to BS EN ISO 9227:2012
- Special paint finishes available depending on quantity
- Compatible with thermal and rigid ducting
- Compatible with Titon's range of MEV fans
- Rubber round gasket to seal with external wall
- Complies with the latest standard as set out in Approved Document B (fire safety) volume 1: Dwellings, 2019 edition
- High flow terminal designed for powered ventilation systems offering low resistance to airflow and high resistance to fire

## High Flow Terminal Resistance - 204x128x100/400/500

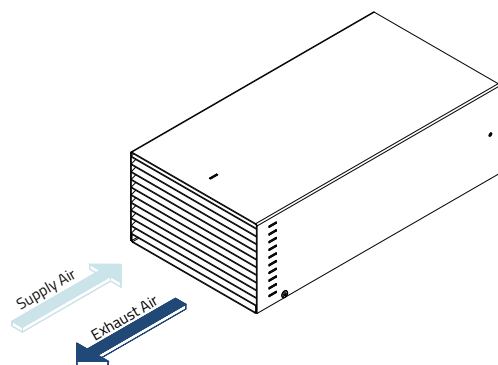
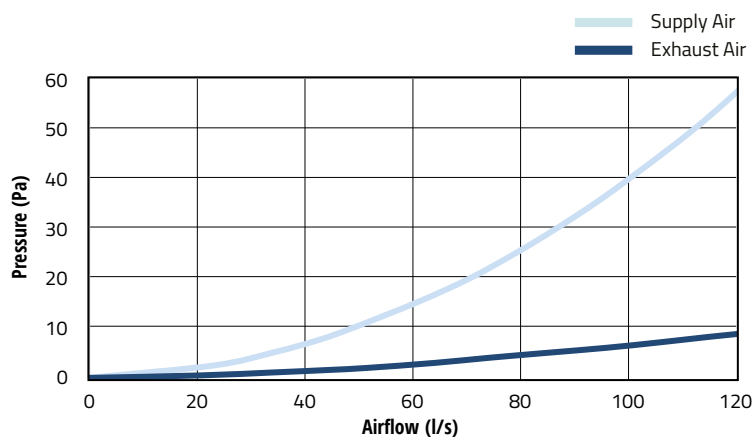


**TA364** – Titon FireSafe® Air Brick 204x128x100/

**TA365** – Titon FireSafe® Air Brick 204x128x100 Bezelled With

**TA366** – Transition 204x128 to 220x90

\*Resistance curve - air brick and accessory combined.



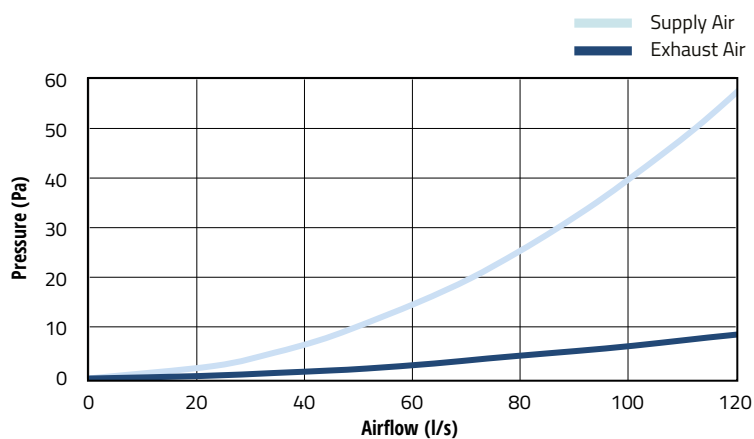
**TA372** – Titon FireSafe® Air Brick 204x128x400/

**TA373** – Titon FireSafe® Air Brick 204x128x400 Bezelled

With

**TA366** – Transition 204x128 to 220x90

\*Resistance curve - air brick and accessory combined.

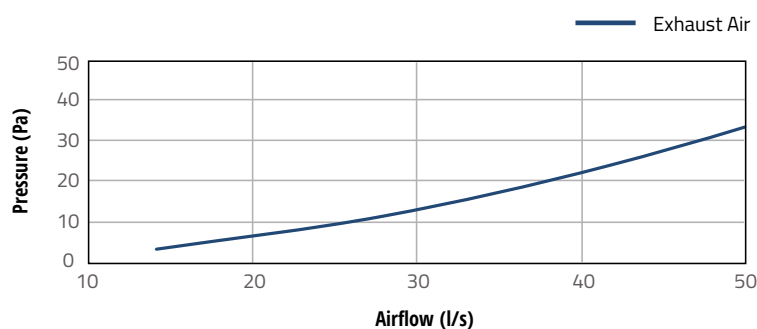
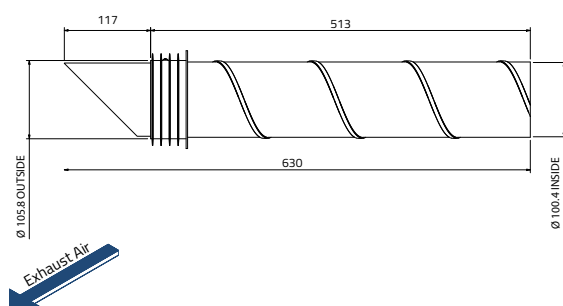


**TA374** – Titon FireSafe® Air Brick 204x128x500/

**TA375** – Titon FireSafe® Air Brick 204x128x500 Bezelled

## High Flow Terminal Resistance - 100mm Push Through Wall Kit

**TA425** – Titon FireSafe® 100mm Push Through Wall Kit



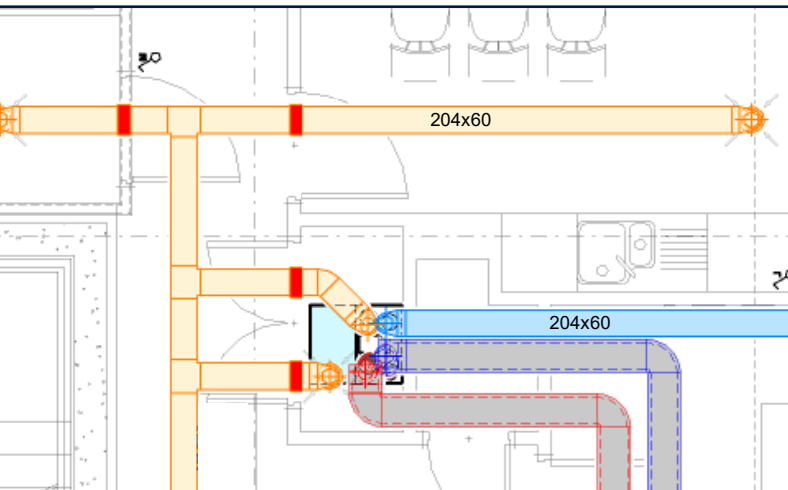
# Trimbox NO<sub>2</sub> Filter® and Design/CPD Services Available

## Trimbox NO<sub>2</sub> Filter®

Titon's award winning Trimbox NO<sub>2</sub> Filter® was one of the first to offer a filter that reduces Nitrogen Dioxide (NO<sub>2</sub>) which is predominantly produced by exhaust gases from diesel engines.

Due to pollution arising in cities and urban areas, there is a need to implement mitigation measures to improve the indoor air quality (IAQ). The Trimbox NO<sub>2</sub> Filter® is an effective means of reducing high NO<sub>2</sub> to an acceptable mean annual concentration level of 40µg/m<sup>3</sup>.

- 98% NO<sub>2</sub> reduction at pre filter concentrations of  $\approx 200\mu\text{g m}^{-3}$
- Low pressure drop and compact design
- Optional ePM1 55% (F7) pre filter can be installed to further improve IAQ
- Fully lined box to reduce duct bound noise and condensation
- Fitted with either 3 or 4 active carbon filters
- ePM1 55% (F7) filter reduces up to 95% of PM<sub>2.5</sub> particles
- ISO Coarse 65% (G4) filter reduces 100% of PM<sub>10</sub>/35% of PM<sub>2.5</sub> particles



## Expert Design, Support and Help

Titon has a dedicated Sales and Technical Departments supporting the Ventilation Systems Division, offering extensive product knowledge to aid and support our customers.

The Design Office can receive drawings of dwellings and provide detailed ventilation designs with calculated ventilation capabilities based on duct run lengths and unit settings.

## CPD Presentations

Currently Titon has four CPD presentations available:

- Part F 2022 Domestic Buildings Compliance (CIBSE CPD/The CPD Certification Service)
- Understanding Overheating: – Approved Document O and Ventilation (The CPD Certification Service)
- Introduction of metal air bricks for building applications into external walls (CIBSE CPD/The CPD Certification Service)
- Scottish Technical Standards – Revision 2015 – Ventilation (The CPD Certification Service)

