

Unohab

Single Room Heat Recovery –
Up to 45 m³/h air volume

A+

When installed with an additional room sensor



KEY FEATURES

- Flow rate up to 45 m³/h
- Up to 88% heat recovery efficiency
- Economical to operate with silent EC axial fan technology
- Easily installed with basic tools
- Optional sound insulation elements to reduce the sound operation by maximum of 8 dB from the total sound pressure level
- ISO Coarse 50% (G3) air filter as standard, easily accessible which can be replaced without tools
- Simple to adjust settings through its intuitive software
- LED display of current operating mode and fan speed
- 2 year warranty*

Unohab - Single Room Heat Recovery

The Unohab opens up completely new possibilities for the economical ventilation of single rooms. The Unohab is particularly useful if there is limited space available due to its compact dimensions, whether it is used in new construction or a renovation, for single-family houses or apartment buildings.

The heat recovery is regenerative with the help of a ceramic heat accumulator, with up to 88% thermal efficiency. The ceramic accumulator is dirt-repellent due

to the smooth surface that ensures constant hygienic operation in connection with the protection grille and the integrated filter (ISO Coarse 50% - filter compliant to ISO 16890). For the sake of balanced ventilation, one functional system consists of a minimum of two units, which operate in their operating modes (supply air/extract air) alternating phases. Furthermore, the total number of ventilation units depends on the air requirement of the dwelling.

* excludes motors. Motor warranty one year from date of purchase

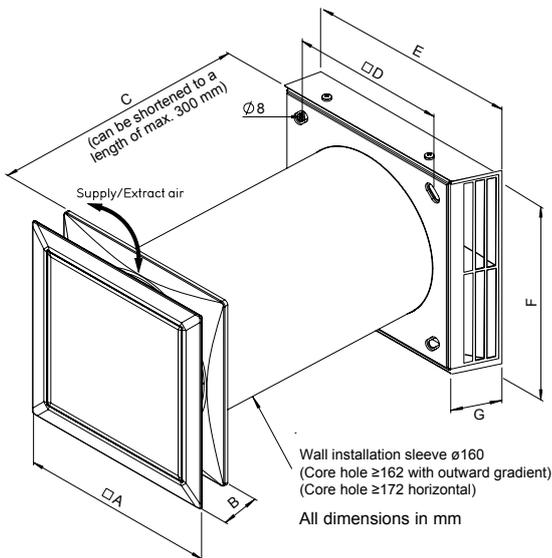


TECHNICAL DATA

Specification	UnoHab				
Fan speed	1*	2**	3*	4**	5*
Air flow supply / extract rate [m³/h]	14	24	32	37	45
Air flow supply / extract rate [l/s]	3.8	6.6	8.8	10.2	12.5
Sound pressure level dB(A)	14	21	27	29	34
Sound insulation, Dn, e, w, dB	44				
Power consumption [W]	1.6	2.1	2.8	3.4	4.5
Heat recovery efficiency	up to 88%				
Heat exchanger	Ceramic				
Filter class	ISO Coarse 50% (G3) - compliant with ISO 16890				
Controls	3 - speed and 3 - operation modes controller				
Power supply	Input 230 V~ 50 / 60 Hz / Output 12 VDC				
Rated current [mA]	17	21	27	32	42
Protection class	IP20				
Fan	EC				
Electrical power supply cable	NYM - O 2 x 1.5 mm²				
Electrical power supply cable (controller)	NYM - O 2 x 1.5 mm²				
Electrical power supply cable (fan unit)	J-Y (ST) Y 3 x 0.8 mm²				
Electrical connection according to wiring diagram no.	SD - 3 / SD - 4				
Weight [kg]	4.65				
Working range temperature	-12°C up to +40°C				
Dimensions [mm]	204 x 234 x 590				
Part number	90001177				

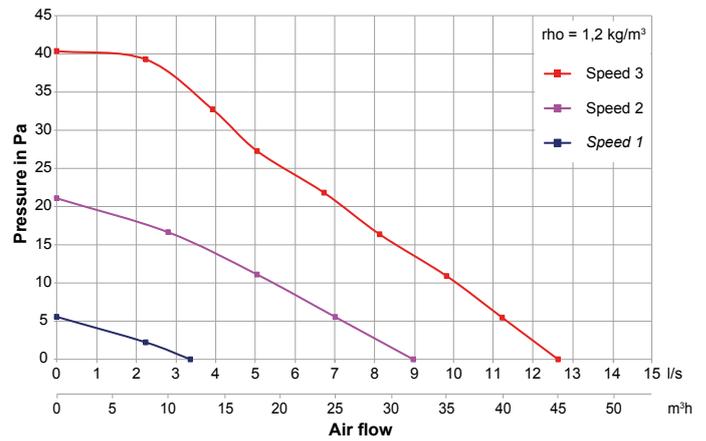
*Default fan speeds
 **Fan speeds, which can be selected on the Duplexvent UnoHab software (only three fan speeds can be selected at the same time).

DIMENSIONS



Model	A	B	C	D	E	F	G
UnoHab	200	45	500 / 800	150	235	204	48

PERFORMANCE

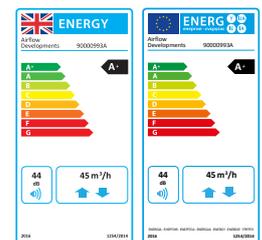


ACCESSORIES

Accessory	Product Code
UnoHab controller	90000992
UnoHab heat exchanger with internal grille and filter	90000993
Controller kit power supply flush mounted	90000994
Controller kit power supply DIN-rail mounted	90000995
PSF (Power Supply Flush mounted)	90000996
Extractor fan module	90000997
PSD (Power Supply DIN rail mounted)	90000998
Controller case for surface mount	90000999
Brickwork template block 365 mm length	90001000
Brickwork template block 490 mm length	90001001
Insect screen	90001003
Wall sleeve 500 mm length	90001005
Wall sleeve 800 mm length	90001006
White external grille	90001007
External wall insulation channel	90001008
Wall grille - stainless steel	90001009
Wall grille - white	90001010
Sound insulation element for wall sleeve installation	90001011
Sound insulation element for window channel installation	90001012
UnoHab ISO Coarse 50% (G4) Filter (pack of 2)	90001014
External wall insulation vent kit	90001165
UnoHab cavity wall installation complete kit (with white external grille)	90001177
UnoHab insulation vent complete kit (with white wall grille)	90001178
Controller complete kit - with power supply flush mounted	90001179
Controller complete kit - with power supply DIN-rail mounted	90001180
Electrical humidstat 30% to 90%	9041570
ON / OFF switch	90000540
On / off switch with neon	90000543
On / off with lockable isolator switched	90000547
On / off lockable and neon switch	90000550
Isolation switch	90000537
Isolation switch with neon	90000538
Isolation switch with neon & fuse	90000539

CERTIFICATION

The UnoHab unit meets requirements set out by the Energy Related Products (ErP) Directive 2016, achieving an A+ rating when installed with an additional room sensor. You can find out more about the ErP Directive and find the UnoHab Fiche and Label at www.airflow.com



Unohab

Single Room Heat Recovery –
Up to 45 m³/h air volume

Unohab can be installed in any of the habitable rooms (bedrooms, living rooms, dining rooms, home office) and through the Unohab extractor fan module it can be connected to QuietAir extractor fans located in wet rooms (toilets, en-suites, bathrooms, utility, kitchen).

Where multiple units of the Unohab are installed, they are linked with each other to ensure the supply and extract function are synchronised. A minimum of two alternating

units forms a functioning ventilation system, whereby multiple Unohab units are installed depending on the air requirement of the dwelling. The intelligent control unit enables the optimal adjustment of individual volume flows – even with an odd number of devices. Furthermore, it is possible for the first time to implement combi-ventilation in combination with extract air solutions, such as the Airflow QuietAir.

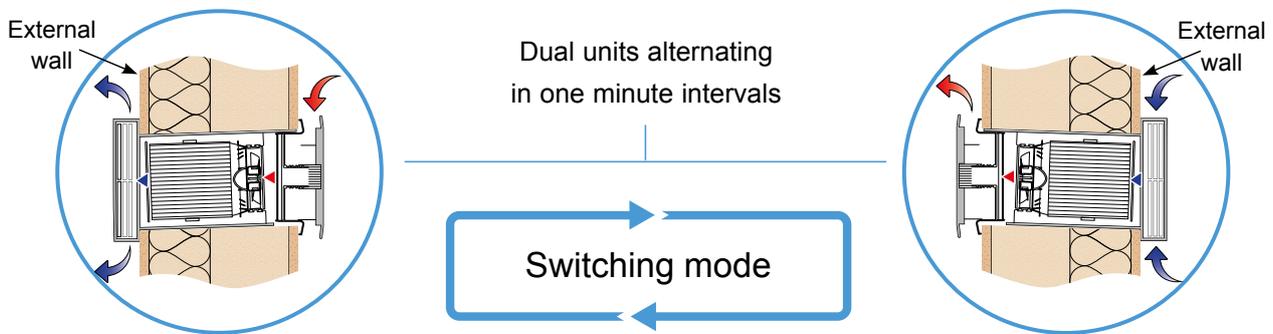
WORKING PRINCIPLE

The Unohab units are non-traditional, ductless and decentralised MVHR (Mechanical Ventilation with Heat Recovery) single room unit.

New and renovated buildings are becoming more airtight due to insulation. The result: Natural air exchange can no longer take place in the rooms and the humid and used air is not discharged to the outside. In order to prevent moisture damage to the building structure (e.g.

dampness and mould), the necessary air exchange rate must be continuous and automatic.

From the ventilation technology perspective, controlled domestic ventilation with heat recovery will fully ensure energy efficiency of the building. In this respect, a decentralised ventilation system with heat recovery offers major advantages, especially in renovation, as it is an economical and simple solution for single rooms.



Extract air

During the extract air phase, the ceramic exchanger absorbs and stores the heat from the room air (storage charging).

Supply air

During the supply air phase, the fresh outside air absorbs the heat from the ceramic accumulator and this pre-heated air flows into the room.

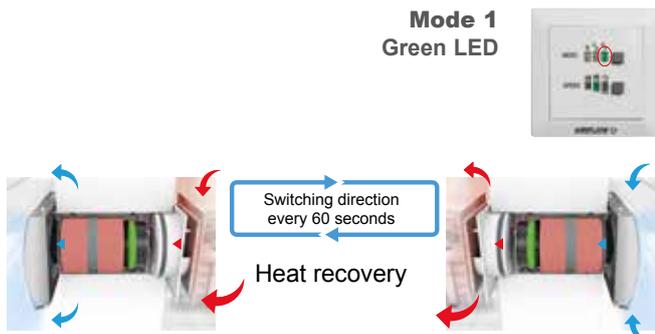
CONTROLS

The *UnoHab* is controlled intuitively via the LED controller, which can be used to control up to eight units at the same time. The buttons are used to select the three ventilation speeds and three operating modes (heat recovery, cross-ventilation and supply air mode). The ventilation speed and operating mode settings can be seen immediately at any time with the dimmable LEDs. They also show the current status of the system and a pending filter change.



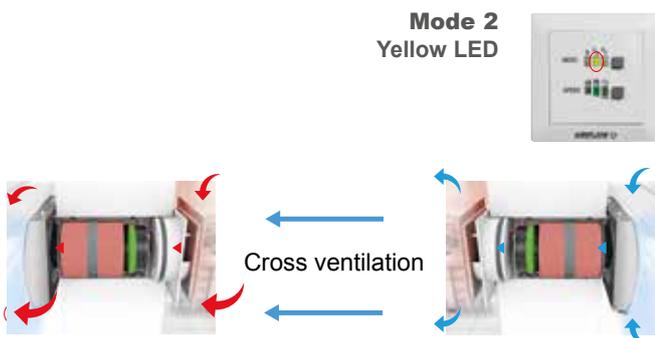
Mode 1 - Heat recovery mode

When operating in heat recovery, the *UnoHab* units alternate between supply and extract air. The ceramic heat accumulator integrated in the *UnoHab* unit absorbs the heat from the passing air in extract air mode and transfers this heat into the incoming fresh air in supply air mode. Thus, up to 88% of the extract air heat is emitted into the incoming fresh air. The push-pull (change of fan direction) activates every 60 seconds which permits the *UnoHab* system to be at its highest thermal efficiency level and best performance.



Mode 2 - Cross ventilation (ideal for summer)

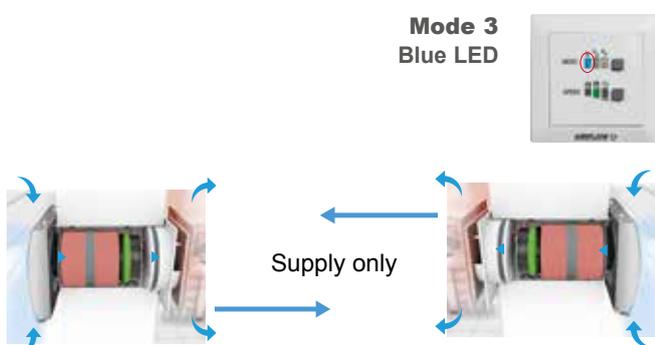
The cross ventilation function enables ventilation without heat recovery. For this purpose, the first *UnoHab* unit, which is connected to the *UnoHab* controller, is switched to supply air mode. The second *UnoHab* unit, which is connected to the subsequent controller terminal, is switched to extract air mode. Cross ventilation function can also be defined as air movement from one point of the property to another, resulting in cooling the inside air through a mechanical force that draws cool air in and pushes stagnant hot air outside.



Mode 3 - Supply air mode

The supply air mode function enables the combination with an extract air fan (e.g. QuietAir). For this purpose, the *UnoHab* units are switched to supply air mode to balance the system. Different configuration settings are available via the commissioning software.

All in all, the *UnoHab* system has every option that a dwelling needs for ventilation: heat recovery mode (warm up the indoor air), cross ventilation mode (cooling the air inside the dwelling) and supply air mode in combination with extract fans for extracting moist air and restoring balanced ventilation in the home. In addition, the *UnoHab* system is small in size with an intuitive controller which makes it ideal for an apartment or a small house.



COMMISSIONING

Commissioning is made simple: quick and user friendly. Thanks to the software, the controller can be connected to a PC or laptop via the USB port. As an alternative to configuring the unit using the two buttons on the controller, the control unit can be accessed easily and conveniently in this way.

Commissioning and the entry of necessary values (e.g. filter change intervals or minimum ventilation stage) can be completed in a short space of time. All possible setting options can be changed quickly using the user interface and user-friendly support is provided with the corresponding help texts. The set configuration can be saved directly on the PC or laptop and re-programmed into the control unit if required.

The installation cost in a larger property is thereby reduced to a minimum. If lots of the same ventilation systems are used, the configuration is just set once for a residential unit and can then be transferred to several controllers or apartments as required.



INSTALLATION

Installation in the façade



1. Required components



2. First fix installation

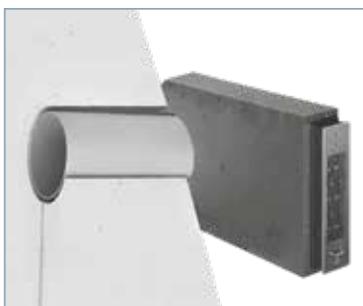


3. Final installation overview

Installation in the external wall insulation



1. Required components



2. First fix installation



3. Final installation overview

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