FRESH AIR FOR YOUR HOME

Easy and care-free – Vallox ventilation

VALLOX

HOME *of* FRESH AIR

HOME OF FRESH AIR

Effective ventilation makes life more comfortable and protects the health of your family and home. Smart and energy-efficient, the Vallox ventilation system guarantees clean and fresh air in your home, whether you are building a new house or renovating an old one.

Ventilation matters for your family

Good indoor air is often taken for granted, which is a serious mistake. Increased carbon dioxide levels in indoor air cause headaches, tiredness and other discomforts. Efficient ventilation ensures that the carbon dioxide level remains adequately low.

Adequate ventilation also prevents the accumulation of moisture from showering, saunas, washing of clothes, cooking, and simply breathing.

Ventilation also removes emissions caused by building and interior decoration materials, known as VOCs, which are not always perceptible to the human senses. That is why it is important to keep ventilation on 24/7.

A high-quality ventilation system measures the air quality automatically, continuously supplying clean, filtered and suitably warm air inside the house - as needed.

Ventilation keeps your home in great shape in the long term

Good ventilation is also beneficial for the structures of your house. Controlled ventilation removes excessive moisture, so that it will not remain in the structures. Ventilation is an important investment that affects the condition and lifespan of a building.

Vallox ventilation is energy-efficient and silent, and it works in any weather conditions. This sets Vallox apart from its competitors.

For new and old buildings alike

The Vallox product range includes ventilation units for houses of any type and size: low-energy and passive houses, renovation projects, terraced houses, and apartments. In addition, the product range includes parts for the ventilation system, such as the air distribution system and cooker hoods. They are easy to install in new and old houses alike.

Choose Vallox and breathe easy!

TESTED FINNISH CUTTING-EDGE TECHNOLOGY

The thoroughly thought-out features of the Finnish ventilation units have been tested and researched. The units are designed with a special focus on energy-efficiency, silent operation and easy ventilation control.

Vallox is a well-known Finnish company with 50 years of experience in the manufacture of ventilation systems. In addition to high-quality ventilation technology, the company's products offer simple but elegant design, silent operation and high energy-efficiency. This makes Vallox the most popular ventilation unit brand in Finland [1].

The Vallox product development department designs and measures all Vallox products before they are introduced in the market. The development work involves the use of acoustic and cold laboratories for the measurement of the characteristics and functioning of the ventilation units, also in challenging conditions. The carefully chosen components and high-end design work ensure that Vallox ventilation units are energy-efficient and do not make disturbing noises.

Each ventilation unit manufactured by Vallox is also carefully tested after each work phase along the production line. A unit must pass strict tests before it is packaged and forwarded for sale.

The Vallox ventilation products are designed and manufactured in Loimaa, Finland. The Key Flag Symbol (Avainlippu) awarded by the Association for Finnish Work indicates that the products are made in Finland.

[1] *Omakotirakentajatutkimus (Detached house constructor survey) 2021/22 SV, Rakennustutkimus RTS Oy, July 2021*

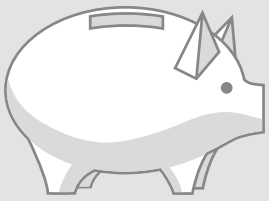
EFFICIENT FILTERING

The high-quality filtering function of the Vallox ventilation units keeps the supply air clean of impurities contained in outdoor air.

Filters must be regularly replaced!

Supply air filters:
ISO ePM1 50%
ISO Coarse > 75 %

Extract air filter:
ISO Coarse > 75 %



ENERGY-EFFICIENT

Vallox ventilation units feature energy-efficient fans and an efficient heat recovery system.

The unit uses sensors to adjust the ventilation according to the need, which saves energy.

For Vallox ventilation units, the annual efficiency of heat recovery from extract air can be as high as

75 %

NO DRAUGHT OR SMELLS

The plate heat exchanger of the units never lets the smells of the extract air back into the house.

The supply air is heated, which prevents draughts and makes the home more pleasant to be.

WORKS IN ANY WEATHER

All Vallox units feature advanced defrosting automation. The ventilation unit works reliably even in very cold weather with a high level of efficiency. No preheating resistor is needed, and both fans operate continuously.

The unit-specific performance values of Vallox are comparable and provide information on the technical performance and energy-efficiency of the units. **Annual efficiency** is the most important comparison figure with respect to the energy consumption of the ventilation system. It indicates the amount of heat that the heat recovery system can recover from the extract air on average throughout the year to heat the supply air. In addition to the efficiency of heat recovery, the efficiency of freeze protection and the weather conditions are other factors contributing to the figure. Annual efficiency is always lower than the ventilation unit's specified supply air temperature efficiency. The annual efficiency of Vallox ventilation units can exceed 75%.

Vallox products are renowned for efficient heat recovery, which enables comfortable and draught-free living. The unit-specific tests carried out along the production line ensure that the products forwarded for sale are working as planned.

LITTLE NEED FOR POST-HEATING

Vallox ventilation units heat the supply air to

17°C

almost throughout the year by using only the thermal energy contained in the extract air.

CONVENIENT AND EASY

Many Vallox units have a week clock function for programming ventilation according to need.

The selection of modes makes MyVallox units easy to control.

Fully automated ventilation can be achieved by using sensors that measure air quality.

QUIET AND AIRTIGHT

The units are silent and do not disturb the peace and quiet of the house.

The excellent thermal and noise insulation properties require that the enclosure of the ventilation unit is airtight. The airtightness of every Vallox ventilation unit is tested during production.

FINNISH QUALITY

Vallox ventilation units are designed and manufactured in the Loimaa factory in Southwest Finland.

Finnish quality made in Finland!

EASY VENTILATION CONTROL WITH MYVALLOX VENTILATION UNITS

MyVallox ventilation units make it easy to enjoy fresh indoor air adjusted to personal needs and pace of life. They enable automated and energy-efficient operation of the ventilation system.

Inconspicuousness is the most important quality of MyVallox ventilation units. They are almost automatic, as their integrated humidity and carbon dioxide sensors detect any changes in the humidity and carbon dioxide levels in the indoor air, ensuring that ventilation is boosted as needed. In addition to the ease of use, need-based ventilation saves energy!

Control your ventilation unit anywhere

The ventilation can be adjusted from the control panel or via a cloud service by using a computer or mobile phone. The unit can also be connected to house automation.

The adjustment is based on the choice of the appropriate mode: At home, Away and Boost. In addition, Vallox units feature a Custom mode: the settings and operation can be tailored to the user's needs. One of the most popular settings is the so-called fireplace function, that is, a temporary underpressure is created to make lighting the fire easier.

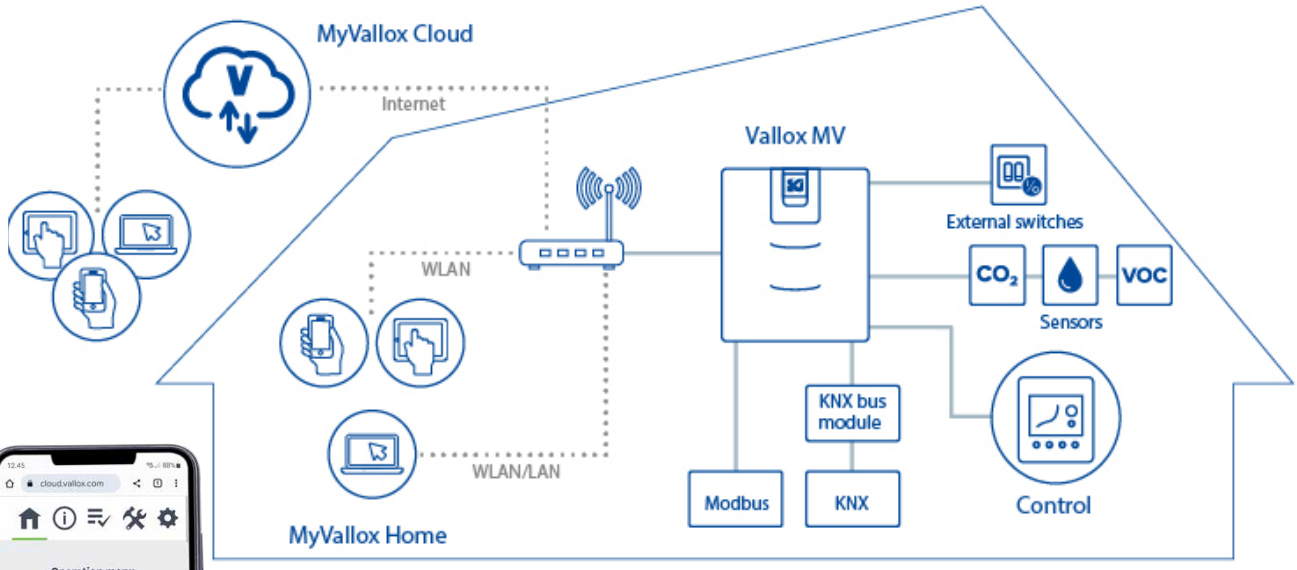
Suits the northern climate

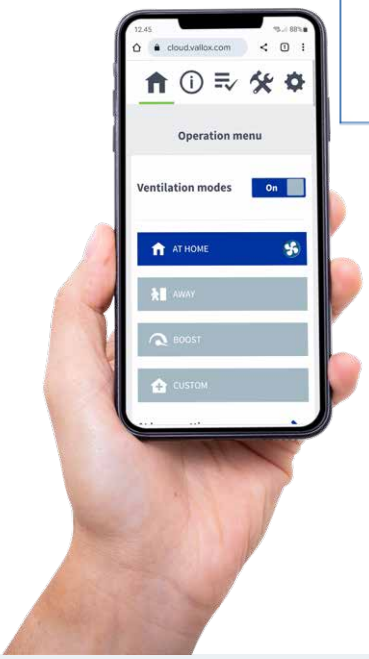
MyVallox ventilation units are designed for northern climate conditions, and they work flawlessly in all seasons. The supply air is always draught-free and at the desired temperature. In hot summer weather, the cooling function of MyVallox units boosts the ventilation when the outdoor air is cooler than the indoor air.

The electricity consumption of the units is very low, and their extremely efficient heat recovery means that, at its best, the actual heating system is rarely needed.

MyVallox ventilation units enable you to pay less attention to the ventilation!

MyVALLOX





You can choose the most convenient way of controlling the ventilation or let the automation take care of it.

The most important thing is to always keep the ventilation unit turned on.

Online control

The free browser-based **MyVallox Cloud** service enables the user to control the ventilation anytime and anywhere when the unit is connected to the Internet. The service also provides statistics on the status of the ventilation. The software of MyVallox units that have been connected to the cloud service is updated automatically.

The unit can also be connected to the home network, allowing it to be controlled through a terminal device that is connected to the home network via **MyVallox Home** service.

MyVallox units can also be controlled with an integrated controller.

Enjoy automatic power control

The integrated carbon dioxide and humidity sensors automatically boost ventilation when the carbon dioxide or humidity level of the air increases. The air remains fresh, even with many people present. The sensors also reduce the efficiency of ventilation once the normal humidity or carbon dioxide level has been restored.

If necessary, external extra sensors may be connected to the units.

Choose additional switches according to your needs

For example, a separate fireplace switch, an At home/Away switch installed next to the front door, or a cooker hood that enables adjusting the efficiency of ventilation can be connected to the unit. The unit may also be connected to house automation.

EASY AND QUICK INSTALLATION OF VENTILATION DUCTS

Vallox BlueSky is a flexible, sound-dampening ventilation duct system that fits in confined spaces.

The Vallox BlueSky duct system distributes fresh, filtered warm air from the ventilation unit into the rooms and carries humidity and carbon dioxide-containing air from the rooms to the ventilation unit.

The Vallox BlueSky duct system is quick to set up, which makes it a cost-efficient solution for renovated and new buildings alike. Vallox BlueSky fits in confined spaces, as the outer diameter of the flexible duct is only 75mm. When the entire system is installed in heated premises, it can be placed inside dropped ceilings or enclosures, for instance.

The system may also be installed in the roof space or intermediate floor, or inside cast concrete. When the framework of the building is being constructed, Vallox BlueSky can usually be installed inside construction components similarly to electrical installations and the sewage system. No additional insulation is usually needed when installed inside blown wool insulation.

Vallox BlueSky duct is easy to install. Thanks to its flexibility and quick couplings, no drilling or riveting is needed. Because the duct can be easily extended, very little material is wasted.

The ducts are hygienic and easy to clean, as the inner surface of the duct is smooth, antistatic and anti-bacterial.

VALLOX

BlueSky

Watch a video on the construction of the BlueSky duct system in Mikko Fiskaali's house in Seinäjoki.

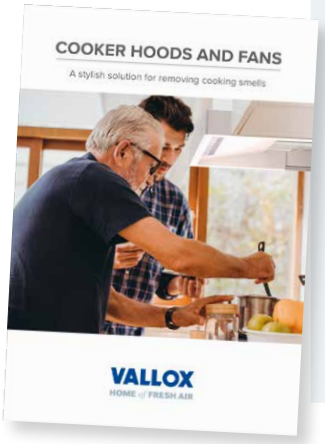
COOKER HOODS AS PART OF THE VENTILATION SYSTEM

The cooker hood is an important kitchen appliance for keeping the indoor air fresh. A good cooker hood is characterised by the efficient removal of cooking smells, stylish appearance and easy operation.

The Vallox product range features cooker hoods and accessories for various purposes: to be used as a separate cooker hood in a detached house; for the controlling of a roof fan; and for the replacement of an old house extraction fan. When you are replacing a cooker hood in an apartment in a housing company, remember to contact the house manager to check the requirements for the appliance.

All Vallox cooker hoods are designed to be integrated in kitchen cabinets. In addition to efficient cooking smell removal, they feature efficient easy-to-clean grease filters and non-glare work lighting.

Read more about our product range in the Vallox Cooker hoods and fans brochure



VALLOX

Delico

Vallox Delico cooker hood range

Vallox Delico is a Finnish hood range that combines subdued Scandinavian design and the efficient removal of cooking smells. The hood merges seamlessly with the rest of the kitchen.

The hoods come with a white or black front panel. They are comfortable to use: the steam collection part slides smoothly, and the LED lighting provides an even and non-glaring light for working. The grease filters effectively collect the grease that is generated during cooking.

A WELL DESIGNED VENTILATION SYSTEM IS ENERGY-EFFICIENT

The planning of ventilation affects the energy-efficiency and indoor air quality of your home. Before building or renovating ventilation in the home, the first step is to hire a HVAC designer.

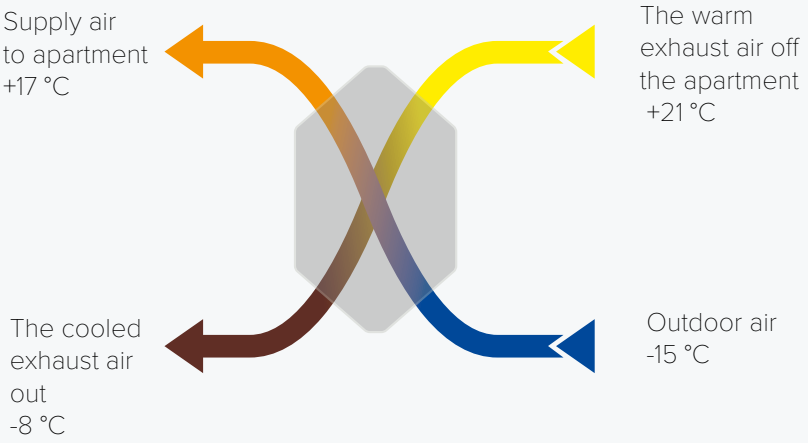
When preparing the ventilation plan, the designer observes the requirements related to the indoor air and ventilation of the building. For instance, the plan describes the airflows in the apartment, the implementation of soundproofing and the type of a suitable ventilation unit. The designer also specifies the efficiency of ventilation for various circumstances in the home. Builders of their own homes and those renovating ventilation are advised to contact an HVAC designer to discuss the automation and control options to find the best ventilation solution to suit their needs and preferences.

Mechanical ventilation promotes energy-efficiency

The airtightness of the building affects energy-efficiency, which is why controlled ventilation plays a major role. The energy consumption of mechanical ventilation is affected by two factors:

1. Heating of the air that replaces the air being extracted. The more efficient the heat recovery, the less energy the post-heating radiator consumes.
2. With the current EC motors, the electricity consumption of the fans is quite low.

Heat recovery can generate savings in other heating of the house, as the ventilation unit can use the heat in the extract air. When choosing a ventilation unit, the annual efficiency is the most important figure indicating energy consumption. It indicates how much of the heat in the extract air the unit's heat recovery system can utilise on average throughout the year. The figure takes into account important practical questions, such as the operation of freeze protection and the weather conditions. Therefore, the annual efficiency figure is always lower than the temperature efficiency figure, and this should be kept in mind when comparing the efficiency of units. For instance, in larger detached houses, the annual efficiency of a typical Vallox 145 MV ventilation unit is as high as 79%!



Recover heat, don't waste it

The heat recovery cell plays an essential role in mechanical ventilation. It utilises the heat recovered from the extract air and transfers it into the supply air. This way, the supply air is also suitably warm in cold weather, in addition to which the system reduces the heating need of the house. Even on cold days, the ventilation unit can heat the supply air to +17 degrees Celsius, and the heating system of the home has to account for only a few degrees.

It is wise to use ventilation according to the need

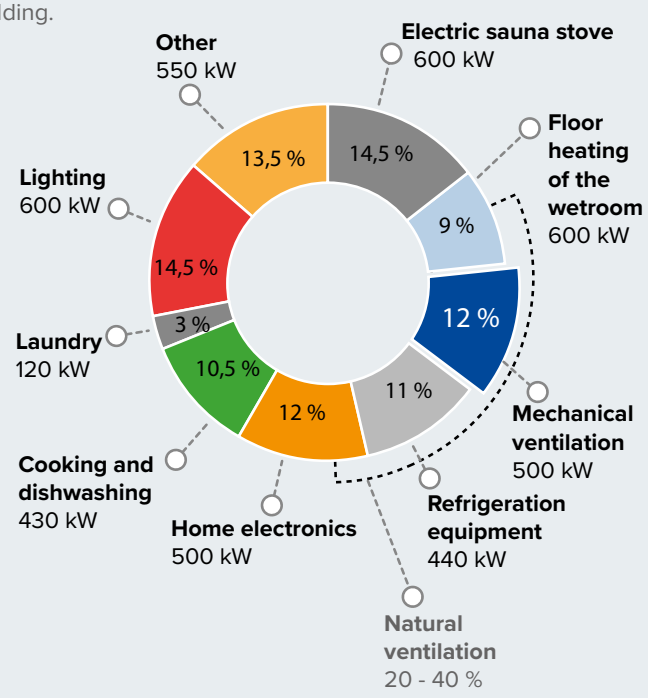
Standard ventilation is dimensioned for each room according to use. Ventilation must be boosted when the humidity and carbon dioxide content of indoor air increase. Lower efficiency is sufficient when the apartment is left empty. Need-based ventilation adapts to the use of the room. It is also energy-efficient: when the efficiency is halved, the energy consumption of ventilation drops by more than half. Therefore, there is no need to turn ventilation off completely for energy saving reasons but use it according to the need.

Automated MyVallox ventilation units ensure need-based ventilation. The integrated carbon dioxide and humidity level sensors automatically boost ventilation, until the desired level is reached. This way, ventilation is never accidentally left too high.

Mechanical or natural ventilation?

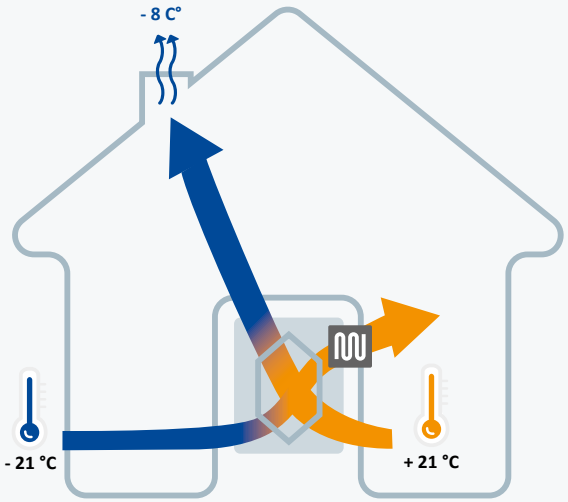
Mechanical ventilation only accounts for about ten per cent of all the electricity consumed. Similarly, in houses with natural or extraction ventilation, ventilation takes up roughly 20–40% of the energy used for heating. For this reason, the energy-efficiency of the ventilation system has a significant impact on the heating costs of the building.

The calculation of the energy consumption of the household used as an example was based on a terraced home with two residents. In this house with district heating, the average annual electricity consumption is 4,100 kW.



Smart defrosting automation

All Vallox ventilation units feature defrosting automation that is activated only when needed. The cell is defrosted with the heat in the extract air and the post-heater heats the supply air, while the electric heating is fully used for heating the home. The Vallox winter function prevents unnecessary defrosting cycles, so that a better annual efficiency is achieved.



COOL IN SUMMER, WARM IN WINTER

Ventilation means an exchange of air. In natural and extract air ventilation, fresh air comes in as it is – hot in summer, cold in winter. Mechanical ventilation with heat recovery keeps the air at the desired temperature. However, it does not replace air conditioning.

Air conditioning and ventilation

Ventilation simply means that the used and "dirty" indoor air is removed and replaced with new, fresh, and oxygen-rich air. Ventilation makes it easier for your family to be and breathe. Ventilation also keeps the structures of your home in good condition. Air conditioning with a heat pump, on the other hand, means that indoor air is recycled and its qualities are changed by means such as cooling it or removing moisture. A heat pump does not bring new air into the apartment.

Relief in hot weather

When the weather begins to warm up in spring, the automation of the ventilation unit takes care of bypassing the heat recovery system. This means that outdoor air is brought in filtered but cool. On hot days, the heat recovery cell also cools the incoming hot air, using the cold recovered from the extract air.

Finnish houses are built to retain heat during the cold winter months. This means that the heat accumulated inside the house in summer also stays in. Sun protection is the easiest means for keeping the home cool in summer. If the sun can shine unobstructed through the windows, the cooling power of the ventilation is usually not enough to keep the indoor temperature at a pleasant level. It would be best to prevent the heat radiation from entering the house by means such as long eaves or canvas awnings. Blinds are helpful but cannot completely prevent the warming of the inner surface of the window.

However, if the thermal load of the home is still too high, a specific cooling device efficiently lowers the temperature to a pleasant level.

Pair your ventilation system with an air-source heat pump or geothermal heat system

Cooling can be arranged, for example, by means of an air-source-heat pump or fan convector mounted on a wall. These devices recycle the indoor air and modify its qualities by cooling and removing moisture, without replacing the air. A separate ventilation system keeps the indoor air fresh.

Cooling may also be achieved by adding an MLV duct radiator to the ventilation system. A duct radiator attached to the geothermal heat system is installed in the outdoor or supply air duct of the ventilation system. It can be used to cool the air flowing in and remove humidity from it.

However, the maximum benefit is achieved from geothermal heating, when an MLV duct radiator can be used for the pre-heating of cold outdoor air, and no electricity is needed to heat the supply air even in cold weather.

In very cold weather, the ventilation unit is under a lot of strain

The ventilation must also remain turned on in below zero weather. If the ventilation unit becomes frozen, the reason for this must be examined. The reason may be incorrect settings or a faulty thermostat or sensor. In the case of newer ventilation units, however, it is normal that some ice develops in the heat recovery cell from time to time. This enables the unit to be made as efficient as possible.

Highly efficient ventilation units produce large volumes of condensing water in cold weather. Condensing water is generated when the humid indoor air comes into contact with the cold heat recovery cell in below-zero weather. This is perfectly normal.

No changes should be made to the unit settings unless their purpose is fully understood. If you have any questions or problems related to the operation of the ventilation unit in winter, please contact an authorised Vallox service centre.

INSTALLATION OPTIONS FOR EVERY LOCATION

A ventilation unit equipped with heat recovery constitutes the heart of the ventilation system. It can be placed in the shower room, toilet room, hall, kitchen, technical room, inside the hall ceiling, etc.

The ventilation unit should be installed in a location where it does not cause disturbing noise and is easy to maintain. A ventilation unit must not be placed in a cold attic.

Removing the heat recovery cell for cleaning and replacing the filters require space. It is advisable to reserve space for repair measures. Space should also be reserved for the maintenance of external equipment, such as duct radiators. It is recommended to locate large units in a separate technical space, for example.

Read how the ventilation unit was smartly hidden behind paneled doors in the home utility room.

Utility room or bathroom

A bathroom is a natural location for a unit, as this enables easy leading of condensing water into the drain. The bathroom is often located quite centrally in the home, which means shorter ducts. Lower models can be placed on top of a washing tower and attached to the ceiling.

Technical space

High-efficiency ventilation units have large heat recovery cells, and their handling requires space. A ventilation unit must be located so that there is enough room to perform maintenance work, and any service hatches should also be made large.

Suspended ceiling

In renovation projects in particular, a suspended ceiling may be the best, or even the only, solution for placing a ventilation unit. An adequately large maintenance door should be left for replacing the filters and carrying out other maintenance measures.

Kitchen

In a small apartment, the ventilation unit can be hidden inside the kitchen cabinet, for example. The Vallox 51K MV, installed above the cooker hood inside the kitchen cabinets, combines ventilation and the removal of cooking smells.

VENTILATION RENOVATION IS WORTH IT

Heating system renovations, additional insulations and window replacements improve the airtightness of a house and reduce air leaks. Controlled mechanical ventilation is the best way for extending the lifespan of a renovated building.

Read our brochure for more information about ventilation in renovation projects.

Achieving energy savings through house renovations should never be done at the expense of the indoor air quality or the condition of the building structures. Adequate ventilation must always be ensured. Inadequate ventilation causes moisture damage to the structures and makes them susceptible to mould growth.

For energy saving reasons alone, it is advisable to replace an old ventilation unit with a new one. The heat recovery efficiency of new ventilation units has increased, and their electricity consumption has reduced significantly. Replacing an old unit with a new one also means access to modern features, such as automation and cloud services.

A need to replace the ventilation unit with a more efficient one arises in situations such as extending a building. The air volumes of the old unit will no longer be adequate.

Vallox units have proven to be relatively reliable, but after decades of use they will inevitably need repairing. Future repair needs can be anticipated by replacing the unit before it fails and results in the need for emergency repairs. If the technology of the unit needs to be replaced, the cost-efficiency of the repairs should be considered carefully.

An HVAC designer hired to update the ventilation system will choose a unit with suitable air volumes. In addition to an adequate air volume, factors affecting the choice of the right ventilation unit include the duct outlets of the old unit and the dimensions of the frame of the unit.

Vallox 125 MV ventilation unit is an example of a unit that can replace even dozens of different old ventilation unit models, and Vallox Aito Kotilämpö is suitable for replacing old air heating units.

Calculate the energy consumption of your ventilation

Download an energy consumption calculator that allows you to estimate the energy consumption of your current ventilation unit and determine how much you can save by replacing your old unit with a new energy-efficient Vallox ventilation unit.

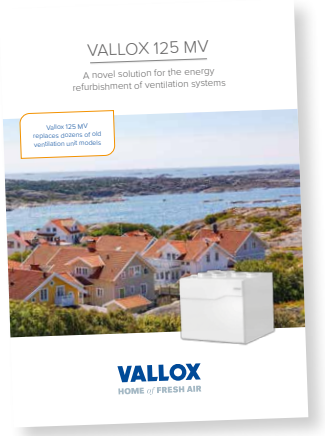
ENERGY-EFFICIENT AND MODERN REFURBISHMENT SOLUTION

The Vallox 125 MV ventilation unit will revolutionarise ventilation refurbishment. Its different models can quickly and easily replace dozens of old ventilation unit models to achieve energy-efficient ventilation with modern features.

When the duct outlets of the new ventilation unit are similar to those of the old unit, the ventilation system can easily and quickly be upgraded to a more energy-efficient and modern solution – which also means savings in money.

The new Vallox 125 MV ventilation unit comes in several models, with the duct outlet being the only difference between them. They either fit directly in place of the old unit or require only minor changes in the duct.

Different models of Vallox 125 MV ventilation units can replace models like the ones below directly, without any changes to the ducts: the Vallox MUH Ilmava, Vallox Digit, Vallox 75, Vallox 95 and Vallox 121 models and, for instance, Ilto 440 and Onnline 130 units made by other manufactures.



Dozens of other old ventilation model units can be replaced with Vallox 125 MV with only minor changes to the ducts.

To learn about the product and check which model can replace your old unit, see the Vallox 125 MV brochure or go to www.vallox.com/en/vallox-125-mv/

MyVALLOX
125 MV

Watch the video of the installation of Vallox 125 MV ventilation unit.

VENTILATION AND ENERGY SAVINGS

As energy is becoming more expensive, many people are considering the option of reducing their ventilation to save energy, and many are also wondering about the energy consumption of mechanical ventilation. Is there anything one can do in this respect? And can some measures harm the working of the unit?

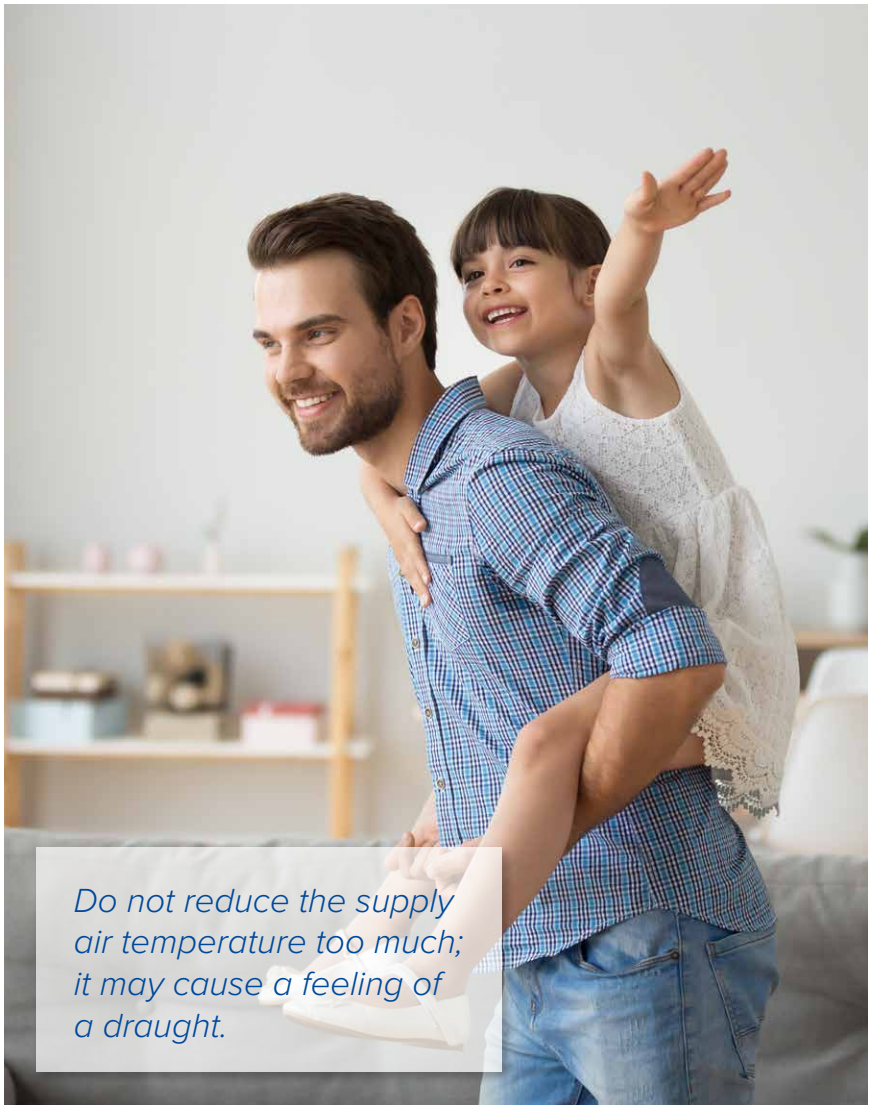
The ventilation is sufficient when the home smells fresh when coming in from outdoors, the air is good in the bedrooms also in the morning, and the wetrooms dry out after their use. A too low supply air temperature can cause unpleasant drafts.

As regards saving energy, the most sensible things to do are to

- use the ventilation according to the need - for instance, when the house is left empty you can reduce the efficiency of the ventilation
- use the automation offered by MyVallox ventilation units
- reasonably reduce the supply air temperature but leave the post-heating resistor on, so that the unit can use it during defrosting cycles.
- replace an old ventilation unit that has AC fans and poor annual efficiency.

Read more about ventilation, energy-efficiency and energy savings:

www.vallox.com > ABC of ventilation > Articles



Do not reduce the supply air temperature too much; it may cause a feeling of a draught.

Remember that you should never turn off the ventilation completely. It is harmful for the operation of the unit and the structures of your home.

REGULAR MAINTENANCE KEEPS THE UNIT WORKING

Similar to all building technology, the ventilation system also needs maintenance from time to time. The regular replacement of the filters improves the quality of indoor air in the home. Therefore, you should not forget this.

In detached buildings, the resident is responsible for the maintenance of the ventilation system. In housing companies, the company is responsible for the condition, maintenance and repairs of the ventilation unit, and for replacing the grease filters of the cooker hood (unless the housing company rules dictate otherwise). The shareholder, on the other hand, is responsible for cleaning the grease filters and valves.

BASIC MAINTENANCE TIPS!

Replacing the filters

The filters should be replaced at least twice a year. If the house is located near busy streets or there are allergies in the family, it might be necessary to change the filters more frequently.

Always use original Vallox filters, as their grade, dimensions, and flow resistance is the best suited to Vallox ventilation units. If the replaced filter differs from the original, this has an impact on the air flows and the changes can create under- or overpressure inside the home. Effective filtering also reduces the need to clean the ducts.

Cleaning of the HR cell

The heat recovery cell can be cleaned with warm water and hand dishwashing liquid. In most cases, washing the cell once in every couple of years is sufficient. There are no moving or wear-out parts in the plate heat exchanger, and it does not require any other maintenance than washing.

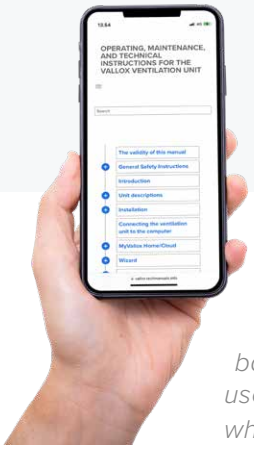
Check the water seal

Before the cold weather sets in, you should always check that the condensing water pipe is unblocked and no insects, etc., have accumulated in the water seal during the summer months.

Grease filter of the cooker hood

The grease filter of the cooker hood must be washed sufficiently often – depending on the use, even twice a month.

Purchase original Vallox filters from your nearest retailer or the online store (in Finland): ***valloxsuodattimet.fi***



You can access the manuals of all MyVallox units via WebHelp. The web-based WebHelp can be used anytime and anywhere at ***www.vallox.com***

DO YOU NEED HELP?

Is my unit working properly?

Why does the ventilation unit keep stopping in cold weather? How can I update my MV unit? Can the ventilation unit be used for cooling on hot summer days?

Answers to most of the questions concerning the functioning of Vallox products can be found on the Vallox website.

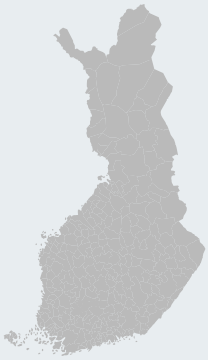
vallox.com > Support and instructions > FAQ

Use professional help

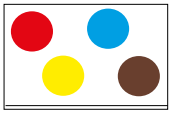
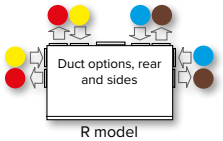
In addition to the ventilation unit, many other factors contribute to the efficiency of ventilation. Therefore, jobs such as the adjustment of valves should never be carried out without letting a professional measure the air flow.

If you notice any changes in the ventilation at home or you are concerned about the ventilation unit, call a service centre and ask a professional for help.

Find your nearest Vallox retailers, service centres, installation companies, designers, and filter sellers through the map service: ***www.vallox.com***

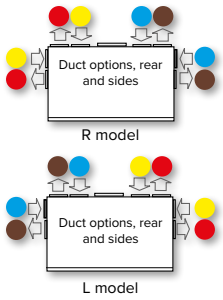
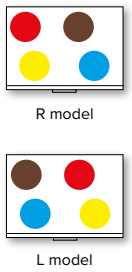
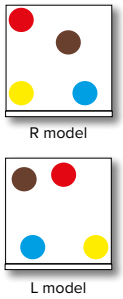
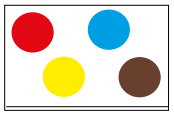


TECHNICAL SPECIFICATIONS

	Vallox 51 MV	Vallox 51K MV	Vallox TSK Multi 50 MV
All models have energy-saving EC fans. BIM models of Vallox products can be downloaded for free for Revit and AutoCAD, and also MagiCAD and CADS are supported. ● = Standard delivery ▲ = Accessory			
Indicative maximum floor area of the apartment[1]	75 m²	75 m²	80 m²
= supply air = extract air = outdoor air = exhaust air Explanation of the symbols  front side Dimensions of the units and duct outlets can be found in the technical instructions for each type of unit.	 R model  L model	 R model  L model	 R model  L model
Dimensions (w x h x d) without a siphon	598 x 668 x 349	598 x 802 x 349	900 x 236 x 547
Weight	45 kg	51 kg	48 kg
Duct outlets	4 x ø 125 mm	4 x ø 125 mm	8 x ø 100 mm
The maximum extract airflow [2] (dm³ / s / 100 Pa)	51	51	57
The maximum supply airflow [2] (dm³ / s / 100 Pa)	46	46	49
Specific energy consumption (SEC) in a cold climate	A+	A+	A+
Specific energy consumption (SEC) in an average climate	A	A	A
Annual efficiency of heat recovery from extract air*	77%	77%	79%
Specific fan power* of the ventilation unit (kW/m³/s)	1.04	1.04	1.3
Type of heat exchanger	Cross-counter flow	Cross-counter flow	Cross-counter flow
HR cell bypass	Automatic	Automatic	Automatic
Post-heating	Electrical resistor	Electrical resistor	Electrical resistor
Control options			
Control methods	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC
Compatible cooker hood	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Integrated Vallox Captura cooker hood	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA
Defrosting			
Defrosting automatics	●	●	●
HR cell bypass	●	●	●
Stopping the supply fan			
Accessories			
Ceiling mounting plate	▲		
Attic floor penetration plate			
Carbon dioxide sensor	● ▲	● ▲	● ▲
Humidity sensor	● ▲	● ▲	● ▲
VOC sensor	▲	▲	▲
Fireplace switch function	●	●	●

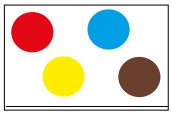
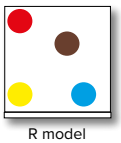
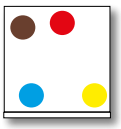
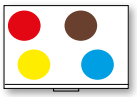
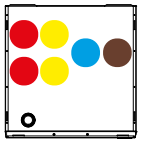
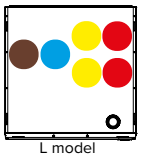
1) The floor areas provided are indicative. The dimensioning must be based on a ventilation plan designed by an experienced professional.

TECHNICAL SPECIFICATIONS

Vallox TSK Multi 80 MV	Vallox 096 MV	Vallox 99 MV	
			All models have energy-saving EC fans. BIM models of Vallox products can be downloaded for free for Revit and AutoCAD, and also MagiCAD and CADS are supported. ● = Standard delivery ▲ = Accessory
120 m²	140 m²	150 m²	Indicative maximum floor area of the apartment[1]
			= supply air = extract air = outdoor air = exhaust air Explanation of the symbols  front side Dimensions of the units and duct outlets can be found in the technical instructions for each type of unit.
1026 x 293 x 626	600 x 545 x 428	598 x 442 x 625	Dimensions (w x h x d) without a siphon
62 kg	47 kg	62 kg	Weight
8 x ø 125 mm	4 x ø 125 mm	4 x ø 125 mm	Duct outlets
93	86	99	The maximum extract airflow [2] (dm^3 / s / 100 Pa)
76	81	92	The maximum supply airflow [2] (dm^3 / s / 100 Pa)
A+	A+	A+	Specific energy consumption (SEC) in a cold climate
A	A	A	Specific energy consumption (SEC) in an average climate
80%	77%	76%	Annual efficiency of heat recovery from extract air*
1.26	1.48	1.12	Specific fan power* of the ventilation unit ($kW/m^3/s$)
Cross-counter flow	Cross-counter flow	Cross-counter flow	Type of heat exchanger
Automatic	Automatic	Automatic	HR cell bypass
Electrical resistor	Electrical resistor	Electrical resistor	Post-heating
			Control options
Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control methods
Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Compatible cooker hood
			Defrosting
●	●	●	Defrosting automatics
●	●	●	HR cell bypass
			Stopping the supply fan
			Accessories
	▲	▲	Ceiling mounting plate
	▲	▲	Attic floor penetration plate
● ▲	● ▲	● ▲	Humidity sensor
● ▲	● ▲	● ▲	Carbon dioxide sensor
▲	▲	▲	VOC sensor
●	●	●	Fireplace switch function

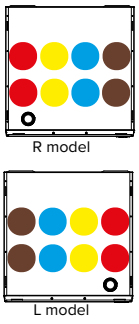
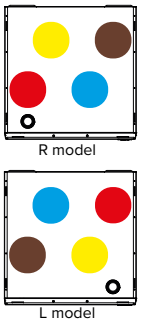
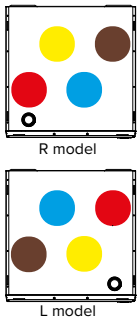
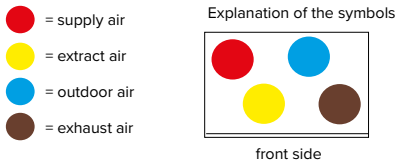
2) The actual airflow during operation is around 50-60 % of the maximum airflow.

TECHNICAL SPECIFICATIONS

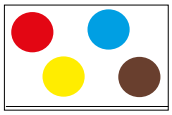
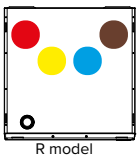
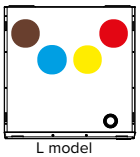
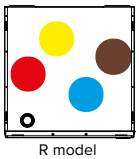
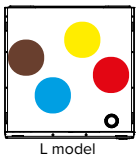
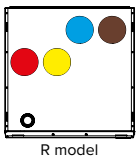
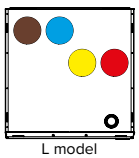
	Vallox 99 MV CF	Vallox 110 MV	Vallox 125A MV
All models have energy-saving EC fans. BIM models of Vallox products can be downloaded for free for Revit and AutoCAD, and also MagiCAD and CADS are supported. ● = Standard delivery ▲ = Accessory			
Indicative maximum floor area of the apartment[1]	150 m²	170 m²	180 m²
= supply air = extract air = outdoor air = exhaust air Explanation of the symbols  front side Dimensions of the units and duct outlets can be found in the technical instructions for each type of unit.	 R model  L model	 R model  L model	 R model  L model
Dimensions (w x h x d) without a siphon	598 x 442 x 625	638 x 678 x 472	598 x 525 x 601
Weight	62 kg	60 kg	66 kg
Duct outlets	4 x ø 125 mm	4 x ø 160 mm	6 x ø 125 mm
The maximum extract airflow [2] (dm^3 / s / 100 Pa)	93	108	127
The maximum supply airflow [2] (dm^3 / s / 100 Pa)	88	103	111
Specific energy consumption (SEC) in a cold climate	A+	A+	A+
Specific energy consumption (SEC) in an average climate	A	A	A
Annual efficiency of heat recovery from extract air*	76%	79%	75%
Specific fan power* of the ventilation unit ($kW/m^3/s$)	1.15	1.26	1.52
Type of heat exchanger	Cross-counter flow	Cross-counter flow	Cross-counter flow
HR cell bypass	Automatic	Automatic	Automatic
Post-heating	Electrical resistor	Electrical resistor	Electrical resistor
Control options			
Control methods	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC
Compatible cooker hood	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA
Defrosting			
Defrosting automatics	●	●	●
HR cell bypass	●	●	●
Stopping the supply fan			●
Accessories			
Ceiling mounting plate	▲	▲	▲
Attic floor penetration plate	▲	▲	▲
Carbon dioxide sensor	● ▲	● ▲	● ▲
Humidity sensor	● ▲	● ▲	● ▲
VOC sensor	▲	▲	▲
Fireplace switch function	●	●	●

*Working point defined in the Ecodesign Directive (2009/125/EC), Southern Finland, Helsinki-Vantaa TRY year 2020.

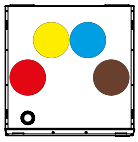
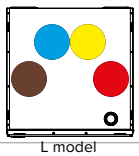
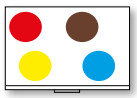
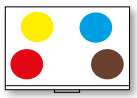
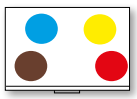
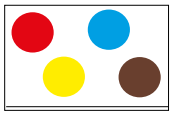
TECHNICAL SPECIFICATIONS

Vallox 125B MV	Vallox 125C MV	Vallox 125D MV	
			All models have energy-saving EC fans. BIM models of Vallox products can be downloaded for free for Revit and AutoCAD, and also MagiCAD and CADS are supported. ● = Standard delivery ▲ = Accessory
180 m²	180 m²	180 m²	Indicative maximum floor area of the apartment[1]
			 Dimensions of the units and duct outlets can be found in the technical instructions for each type of unit.
598 x 525 x 601	598 x 525 x 601	598 x 525 x 601	Dimensions (w x h x d) without a siphon
66 kg	66 kg	66 kg	Weight
8 x ø 125 mm	4 x ø 160 mm	4 x ø 160 mm	Duct outlets
127	127	127	The maximum extract airflow [2] (dm^3 / s / 100 Pa)
111	111	111	The maximum supply airflow [2] (dm^3 / s / 100 Pa)
A+	A+	A+	Specific energy consumption (SEC) in a cold climate
A	A	A	Specific energy consumption (SEC) in an average climate
75%	75%	75%	Annual efficiency of heat recovery from extract air*
1.52	1.52	1.52	Specific fan power* of the ventilation unit ($kW/m^3/s$)
Cross-counter flow	Cross-counter flow	Cross-counter flow	Type of heat exchanger
Automatic	Automatic	Automatic	HR cell bypass
Electrical resistor	Electrical resistor	Electrical resistor	Post-heating
			Control options
Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control methods
Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Compatible cooker hood
			Defrosting
●	●	●	Defrosting automatics
●	●	●	HR cell bypass
			Stopping the supply fan
			Accessories
	▲	▲	Ceiling mounting plate
	▲	▲	Attic floor penetration plate
● ▲	● ▲	● ▲	Humidity sensor
● ▲	● ▲	● ▲	Carbon dioxide sensor
▲	▲	▲	VOC sensor
●	●	●	Fireplace switch function

TECHNICAL SPECIFICATIONS

	Vallox 125E MV	Vallox 125F MV	Vallox 125G MV
All models have energy-saving EC fans. BIM models of Vallox products can be downloaded for free for Revit and AutoCAD, and also MagiCAD and CADS are supported. ● = Standard delivery ▲ = Accessory			
Indicative maximum floor area of the apartment[1]	180 m²	180 m²	180 m²
= supply air = extract air = outdoor air = exhaust air Explanation of the symbols  front side Dimensions of the units and duct outlets can be found in the technical instructions for each type of unit.	 R model  L model	 R model  L model	 R model  L model
Dimensions (w x h x d) without a siphon	598 x 525 x 601	598 x 525 x 601	598 x 525 x 601
Weight	66 kg	66 kg	66 kg
Duct outlets	4 x ø 125 mm	4 x ø 160 mm	4 x ø 125 mm
The maximum extract airflow [2] (dm^3 / s / 100 Pa)	127	127	127
The maximum supply airflow [2] (dm^3 / s / 100 Pa)	111	111	111
Specific energy consumption (SEC) in a cold climate	A+	A+	A+
Specific energy consumption (SEC) in an average climate	A	A	A
Annual efficiency of heat recovery from extract air*	75%	75%	75%
Specific fan power* of the ventilation unit ($kW/m^3/s$)	1.52	1.52	1.52
Type of heat exchanger	Cross-counter flow	Cross-counter flow	Cross-counter flow
HR cell bypass	Automatic	Automatic	Automatic
Post-heating	Electrical resistor	Electrical resistor	Electrical resistor
Control options			
Control methods	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC
Compatible cooker hood	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA
Defrosting			
Defrosting automatics	●	●	●
HR cell bypass	●	●	●
Stopping the supply fan			
Accessories			
Ceiling mounting plate	▲	▲	▲
Attic floor penetration plate	▲	▲	▲
Carbon dioxide sensor	● ▲	● ▲	● ▲
Humidity sensor	● ▲	● ▲	● ▲
VOC sensor	▲	▲	▲
Fireplace switch function	●	●	●

TECHNICAL SPECIFICATIONS

Vallox 125H MV	Vallox 145 MV	Vallox 245 MV	
			All models have energy-saving EC fans. BIM models of Vallox products can be downloaded for free for Revit and AutoCAD, and also MagiCAD and CADS are supported. ● = Standard delivery ▲ = Accessory
180 m²	250 m²	430 m²	Indicative maximum floor area of the apartment[1]
 R model  L model	 R model  L model	 R model  L model	= supply air = extract air = outdoor air = exhaust air Explanation of the symbols  front side Dimensions of the units and duct outlets can be found in the technical instructions for each type of unit.
598 x 525 x 601	717 x 748 x 578	1038 x 1241 x 773	Dimensions (w x h x d) without a siphon
66 kg	80 kg	181 kg | VKL 187 kg	Weight
4 x 160 mm	4 x ø 200 mm	4 x ø 250 mm	Duct outlets
127	160	271 | VKL 269	The maximum extract airflow [2] (dm^3 / s / 100 Pa)
111	142	247 | VKL 229	The maximum supply airflow [2] (dm^3 / s / 100 Pa)
A+	A+	A+	Specific energy consumption (SEC) in a cold climate
A	A	A+	Specific energy consumption (SEC) in an average climate
75%	79%	82%	Annual efficiency of heat recovery from extract air*
1.52	1.25	0.68 | VKL 0.70	Specific fan power* of the ventilation unit ($kW/m^3/s$)
Cross-counter flow	Cross-counter flow	Cross-counter flow	Type of heat exchanger
Automatic	Automatic	Automatic	HR cell bypass
Electrical resistor	Electrical resistor	Electrical resistor / liquid radiator (VKL)	Post-heating
			Control options
Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control panel, Cloud service, LAN, Modbus, KNX, 0-10 VDC	Control methods
Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X-Line KTXA	Delico PTD EC, KTD A X-Line PTXP MC, X-Line PTXPA MC, X -Line KTXA	Compatible cooker hood
			Defrosting
●	●	●	Defrosting automatics
●	●	●	HR cell bypass
			Stopping the supply fan
			Accessories
▲			Ceiling mounting plate
▲	▲		Attic floor penetration plate
● ▲	● ▲	● ▲	Humidity sensor
● ▲	● ▲	● ▲	Carbon dioxide sensor
▲	▲	▲	VOC sensor
●	●	●	Fireplace switch function

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