

Product summary

emcovent decentralised ventilation

emcobad

emcobau

emcoklima

EMCO

emcovent **decentralised ventilation**

emco started business more than 35 years ago with a series of reliable air diffusers conformant with the technological status at that time. Systematic development for various air flow systems, flexibility in creating individual solutions and on-schedule delivery have created a relationship of trust between emco and its partners. Today emco offers a extensive range of products for air and water flow systems as well as a wide array of accompanying services,

including calculations with proprietary computer programmes and lab testing. Because well-being is the basic prerequisite for performance, safety and health of a building's occupants.

When air conditioning closed areas in office and industrial sectors, the system must be tailored specifically to the occupants' needs as well as the struc-

tural conditions.

Decentralised ventilation systems offer both architects and planners a multitude of possible combinations between centralised and decentralised air conditioning systems. Innovative control technology makes it possible to coordinate the control between the various systems.



Decentralised ventilation for an optimum room climate



An optimum room climate requires careful planning and accurate installation. Yet air conditioning technology is affected by modern architecture, sophisticated façade designs and the desire for highly flexible yet maximum use of space. Sophisticated façade designs offer not only good thermal insulation and acoustic attenuation against exterior noise, but also shields off intensive solar radiation. It therefore makes sense to integrate the ventilation system into the façade in order to not lose any further space. When doing so, these high-tech systems must be able to provide not only acoustic attenuation against exterior noise with extremely low inherent noise but also temper the outside air being fed into the building.

Energy recovery gained from the exhaust air and an intelligent, network-capable control system make the symbiosis of façade and ventilation complete. Not only do the devices fulfil these demands in a precise manner, their

intelligent and patented design and details make them stand out from the competition. The use of highly insulating and attenuating materials provides acoustic absorption and prevents thermal bridges.

The decentralised devices can be used in a wide array of applications in modern building services. In new buildings, their compact and innovative design makes them highly adaptable and easy to integrate into any façade. Devices are available for direct installation into the façade, perimeter or floor. When using these devices, additional intermediate ceiling space for the ventilation system and large ducts for a central air conditioning system are not necessary. The energy-efficient movement of warm and cold air via 2- or 4-pipe system means they are real space-savers and thus often the first and only choice for renovation applications. The absence of controlled ventilation, little or no cooling capacity and cramped

space make is necessary to use decentralised ventilation systems. In renovation applications, the highest possible cooling capacity can be reached when the decentralised ventilation system is combined with emcocoool chilled ceilings and other devices from the emcotherm product line.

Main advantages of decentralised façade ventilation:

- Comfort-/stand-by-/night modes with adjustable setpoint values
- Fresh air supply with heating and cooling
- Diverse monitoring functions
- Room temperature control
- Frost protection control
- Connection to third-party devices and building automation system via LON-Talk® protocol
- Diagnosis via remote maintenance
- Individual room control optional

Legend of functions



Heating



Cooling



Secondary air



Ventilation supply air

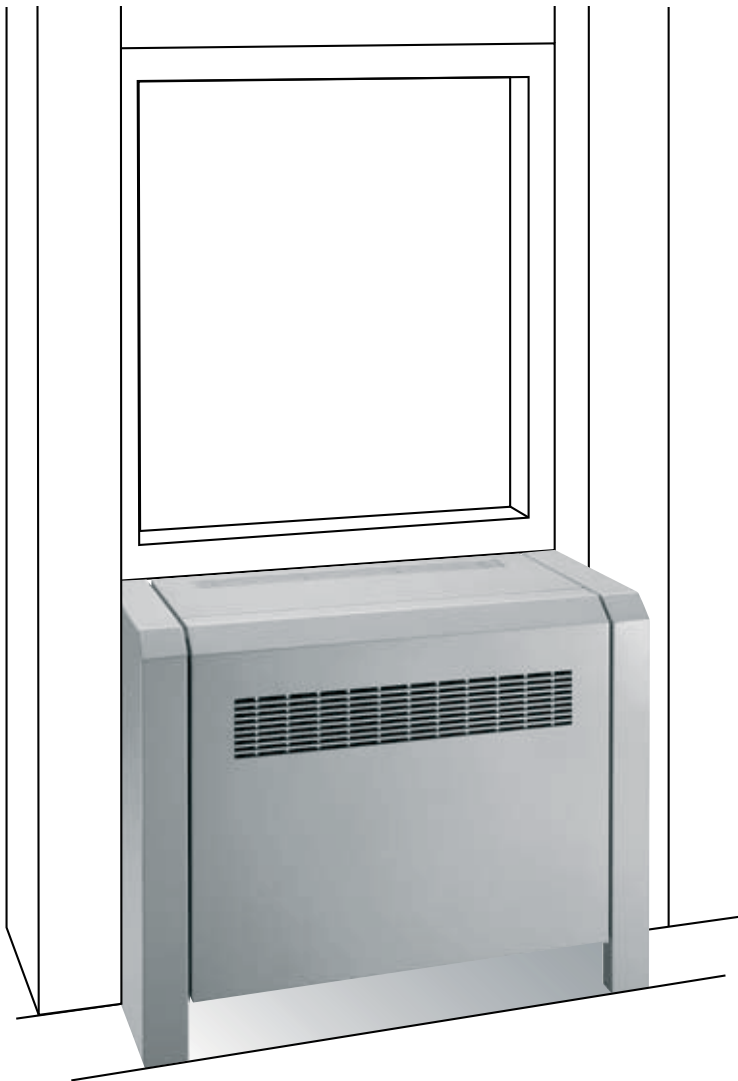


Ventilation outgoing air



Heat recovery

emcovent façade device models



emcovent façade device (Sample installation with casing.)

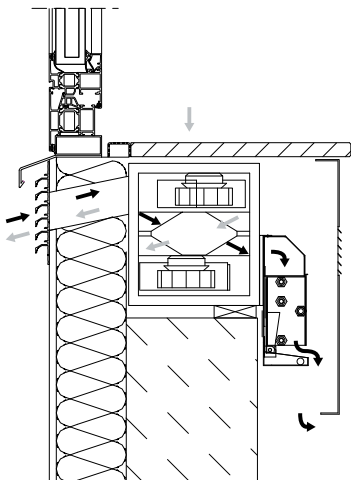


emcovent decentralised ventilation device (perimeter or floor models) for fresh air supply with the following functions:

- Supply air
- Supply air and secondary air
- Supply and outgoing air (optional heat recovery with bypass)
- Supply and outgoing air (optional heat recovery with bypass) and secondary air
- Heat exchanger, heating and cooling elements in copper/aluminium as 2- or 4-pipe system
- Drain pan
- Filter slot
- Acoustic insulation and attenuation for the exterior air connection
- Thermal insulation
- Easy to clean and maintain according to VDI 6022
- Supply air with EC centrifugal fans (energy-saving)
- Electrical exterior closure with non return damper

Types of Airflow

- ➔ Supply air
- ➔ Outgoing air
- ➔ Secondary air

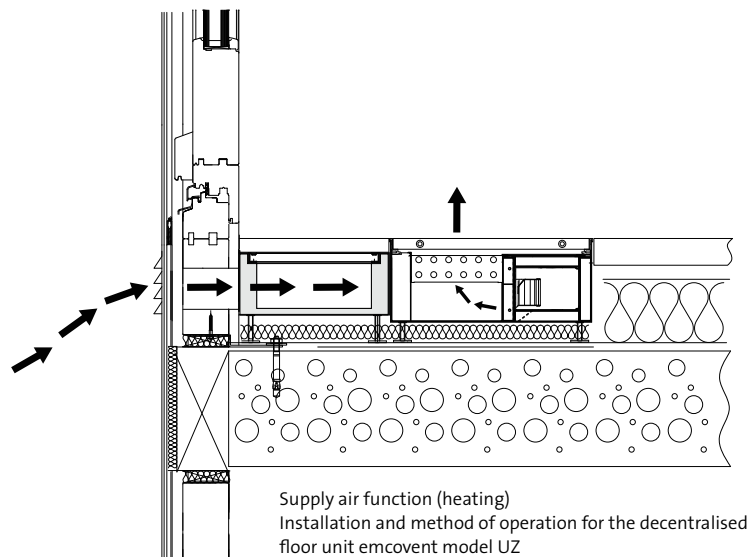
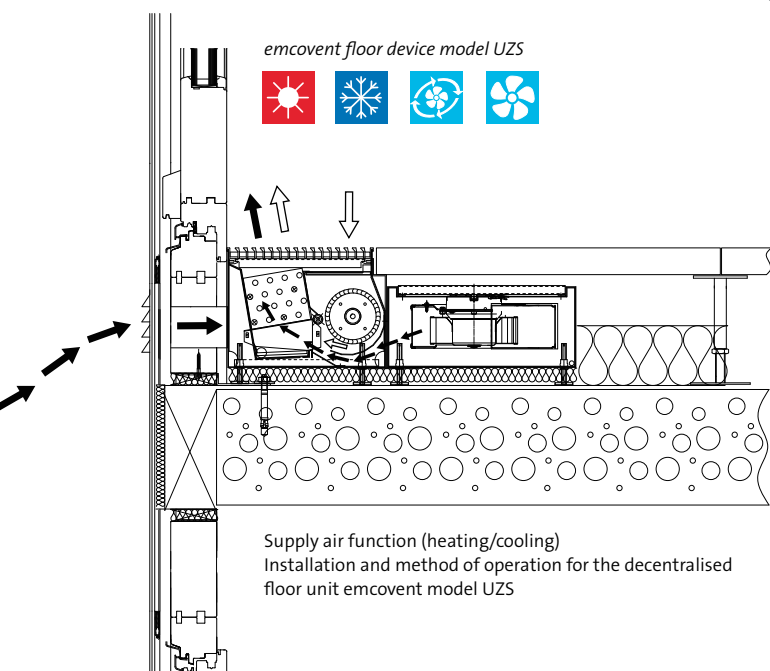


Model with supply, outgoing and secondary air functions, heat recovery and junction valve

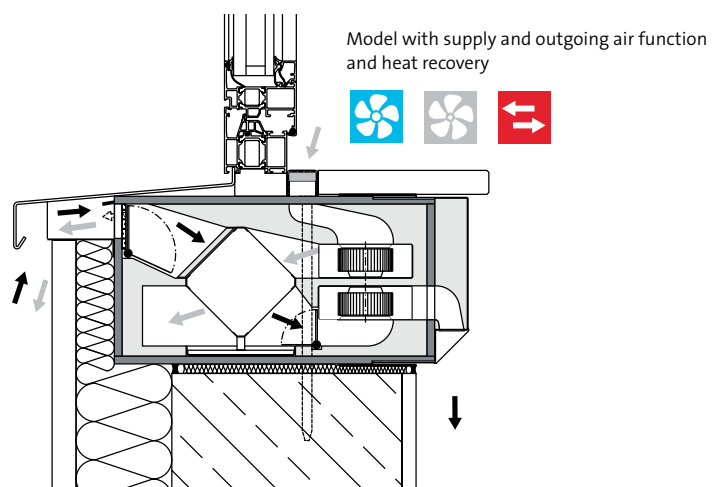
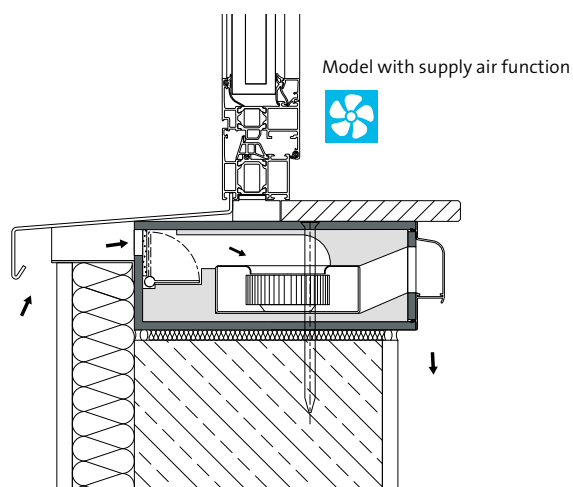


emcovent façade device (without casing)

emcovent floor device models



Additional decentralised device models as window ventilation systems



We specialise in solutions for specific building requirements

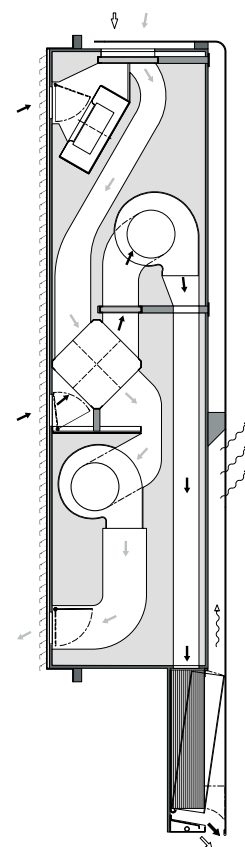


Specialised solutions for:

- Hotels
- Day care
- Music schools
- Living space
- Renovations

Specialised solution for the Intercity-Hotel, Hamburg

Model with supply, outgoing and secondary air functions, heat recovery and junction valve





Project: Steidle Lofts in the Lenbach Gardens, Munich



Project: Apartment Sandtorkai Hafencity, Hamburg



Project: Gasometer, Vienna



Project: Restaurant Dreiländereck, Basel, Switzerland



Project: Holzafen Hamburg, Neuer Hafenklang



Project: Tech Gate, Vienna

Fax reply form

Please simply complete the form and we will send you the relevant documentation.

Please contact us on tel. **+49 (0) 591 9140-630** to arrange a personal consultation with one of our experts

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- ☐ emcoair ventilation components
- ☐ emcoair system air conditioning units
- ☐ emcotherm convectors
- ☐ emcovent decentralised ventilation
- ☐ emcovent window and sound insulation ventilators
- ☐ emcovent PCM individual room conditioning
- ☐ emcocool chilled ceiling systems
- ☐ emcocool cooling convectors for ceilings
- ☐ Teddington air curtain systems
- ☐ Pricelist

Place / Date: _____

Signature: _____

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Gruppe Lingen

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