



 **GEALAN**

INNOVATION MIT SYSTEM

GEALAN-CAIRE®

The innovative ventilation systems

Healthy indoor
air quality

Air gives life

WHY VENTILATION IS SO IMPORTANT



Health as a feel-good factor

Clean air in your home is not only a feel-good factor, but the foundation for a healthy life. Due to increasingly energy-efficient buildings and different usage patterns, conventional ventilation through open windows is not always sufficient. GEALAN-CAIRE® ventilation systems are the solution. They bring fresh air into the house day and night - without having to open a window. Dust and pollen do not enter your rooms and do not enter your lungs. Headaches due to too high CO₂ levels are a thing of the past. Knowing that risks are eliminated will make you feel at ease.



Effective pollen protection

The active GEALAN-CAIRE® ventilation systems work with efficient filters that meet the latest technological standards. They filter out many problematic particles from the incoming air: Fine dust, pollen, fungal spores and other allergens are trapped in the filter and do not get into the air you breathe. The burden for allergy sufferers is drastically reduced. In pure air you can finally breathe again. The rooms where you spend most of your life, where you sleep, where your children grow up, are a sensitive area.



Controlled humidity protection

A family of four releases up to 10 litres of water vapour every day through their physical presence and use, for example by showering, drying laundry and cooking. The moisture must be eliminated quickly from your living quarters in order to achieve a pleasant humidity of 40 to 50%. GEALAN-CAIRE® ventilation systems remove excess moisture in a controlled manner. This way, mould spores, bacteria and mites don't stand a chance. At the same time, damage to the substance of your property is excluded; it remains dry and retains its value.



Save money and protect the environment

Energy efficiency and protection of the climate are important cornerstones of modern construction. We want to use energy resources carefully, construct better and better insulated buildings and design their ventilation systems to be highly efficient. Active, decentralised GEALAN-CAIRE® ventilation systems achieve the most efficient ventilation with maximum heat recovery with a minimum of power consumption. The heat of the exhaust air is indirectly transferred to the supply air and is dissipated via separate, self-contained channels. This ensures that the air flows cleanly separated, but the heat is used several times. This helps you to save energy, reduce costs and protect the environment.





Noise reduction for restful sleep

GEALAN-CAIRE® ventilation systems achieve optimal sound insulation values. Regardless of which system you choose, the noise protection effect of your external walls and windows maintains a consistently high level. Ventilation without allowing street and traffic noise to penetrate inside – a great advantage over opening windows. The active GEALAN-CAIRE® ventilation systems have powerful but quiet fans and sound-absorbing casings. This keeps noise outside and fresh air comes in as quietly as possible. You enjoy the peace and quiet and will sleep soundly and restfully.



More security

GEALAN-CAIRE® ventilation systems make no compromises in safety. Ventilating with the window closed means more security: the classic open-window ventilation or ventilating with the window in the tilt position invites burglars. With GEALAN-CAIRE®, your living space is always securely locked and protected against burglary.

The right solution for every application:

Small. Invisible. Flexible.

Passive fan GEALAN-CAIRE® flex

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Smart. Powerful. Practical.

Active fan GEALAN-CAIRE® smart

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Retrofittable. Also for large rooms.

Active fan GEALAN-CAIRE® MIKrovent

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Ventilate as needed

PASSIVE OR ACTIVE SYSTEMS

Passive ventilation - Compact and unobtrusive

Passive ventilation systems such as GEALAN-CAIRE® flex are based on pressure equalisation between indoor and outdoor air. If there is a pressure difference, the window rebate ventilators allow a compensating air flow, either inward or outward. In strong winds, the air flaps close, so that no draughts occur in your rooms. Passive systems are simple but effective, reliable and inexpensive. They ensure permanent basic ventilation, prevent mould and work independently. Mounted in the window rebate, they are compact and inconspicuous.

Active ventilation

– energy efficiency for the whole house

Active ventilation systems such as GEALAN-CAIRE® smart and GEALAN-CAIRE® MIKrovent use fans to actively generate an air flow. As soon as the indoor climate values measured by sensors (temperature and humidity) deviate from the ideal, active systems begin to transport bad air outside and fresh air inside. Active ventilation can move large volumes of air and is the right choice when large rooms or entire homes need to be ventilated in an energy-efficient way without occupants having to do anything or spend time on it.

Smart ventilation – with GEALAN-CAIRE®

The conventional window ventilation alone no longer meets today's ventilation standards. GEALAN relieves you of the worry about the air in your home, because GEALAN-CAIRE® ventilation systems take care of ventilation in such a way that a healthy, comfortable room climate is created without you having to think about ventilation. Depending on whether you want to ventilate small or large rooms, or install ventilation in existing or new buildings: With decentralised systems, GEALAN-CAIRE® offers you the right solution for your individual needs - well thought-out, powerful and energy-efficient.



Passive ventilation

GEALAN-CAIRE FLEX

Application range

GEALAN-CAIRE® flex is a rebate ventilator for existing and new buildings. The system allows for a permanent exchange of air when the window is closed, without you having to do anything, and is especially useful for preventing mould by removing moist air to the outside. The passive ventilator does not need to be controlled, and is therefore resistant to faults and requires little maintenance. GEALAN-CAIRE® flex is easy to install and fits almost invisibly into various window systems. The air flow rate can be increased by installing several window rebate ventilators.

Layout and function

GEALAN-CAIRE® flex can be used independently of the system in PVC window systems with rebate seals of different installation depths. The window rebate ventilator is placed between the sash and frame instead of the sash rebate seal. In the respective colour of the window seal, it is almost invisible. GEALAN-CAIRE® flex reacts automatically to the slightest movement of air. In strong winds, the system creates the desired tightness of the windows. In normal weather, it allows fresh air to flow inside.

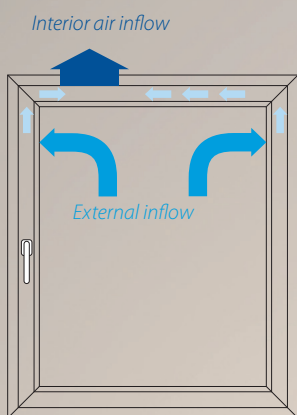


GEALAN-CAIRE® flex is almost invisible. The ventilator sits hidden in the window rebate and is easy to install and retrofit. Even with the smallest pressure differences, it reliably brings fresh air into the house without you having to open the window. So mould has no chance.



-  Save energy
-  Healthy living
-  Dampness protection
-  Noise protection
-  Security
-  Autonomous operation
-  Heat recovery
-  Intelligent control
-  Air filter included

Direction of flow within the window rebate



Indoor inflow

GEALAN-CAIRE® flex allows fresh air to flow into the window rebate through targeted openings and out into the room through the upper window area on the inside: perfect for comfortable basic ventilation that transports moisture outside and effectively prevents mould. Depending on the air pressure difference, the system achieves an air flow of 2 to 13 m³ per hour. In strong winds, GEALAN-CAIRE® flex closes by itself and prevents drafts.

Active and smart ventilation

GEALAN-CAIRE SMART

Application range

GEALAN-CAIRE® smart is an active, decentralised ventilation system with effective heat recovery for existing and new buildings that meets the highest demands for ventilation and energy efficiency. Precise sensor technology measures air temperature and humidity and controls the fresh air supply either fully automated or in a customised way. Filters catch dust, pollen and other harmful particles. You can conveniently control GEALAN-CAIRE® smart via a mobile app from your smartphone or tablet and easily integrate it into your smart home system. The apps are available for both Android and iOS operating systems.



GEALAN-CAIRE® smart visibly mounted on the frame



Layout and function

GEALAN-CAIRE® smart is installed on the side or top of your window. The airflow is 4 to 40 m³ per hour. Exhaust and supply air flow through neatly separated channels. Two filters of class ISO Coarse 50% (optional ISO ePM25 70%) filter dust, pollen and other harmful particles and are easy to change. A highly efficient heat exchanger minimizes heat loss. You decide whether you want GEALAN-CAIRE® smart to run automatically or whether you want to select the fan speeds individually. The system has an optional WiFi connection.

Installation options (flush-mounted)

The components for GEALAN-CAIRE® smart are available in various colours and surface finishes and adapt perfectly to your window system, inside and out. The ventilation system can be installed under the insulation and plastering. A top duct base part, which can be expanded with an adapter with a 20-mm grid, allows for easy installation in your thermal insulation composite system, no matter how thick the insulation layer is. Only the narrow air inlet and air outlet grids in the window reveal remain visible.



Flush-mounted installation of GEALAN-CAIRE® smart



Heat recovery with heat exchanger

GEALAN-CAIRE® smart meets the highest standards of energy efficiency because the system works with recuperative heat recovery: Exhaust air and supply air meet indirectly in a highly efficient cross heat exchanger (efficiency up to 91%), and the exhaust air transfers its heat to the supply air. The heating energy that has warmed your rooms is not lost, but is used in the ventilation system to heat the fresh air. Only fresh and purified air enters your home.



Usable with or without app

It's up to you how you want to operate GEALAN-CAIRE® smart: either with a touch sensor directly on the device or with a flush-mounted button. But GEALAN-CAIRE® smart can also be controlled like its name: via mobile app on your smartphone or tablet. Would you like to control all GEALAN-CAIRE® smart ventilation in your house centrally with your smartphone and regulate the ventilation without getting up from the sofa? With app control via your WLAN network, it's very easy.



100% fresh air

Extracted air

Purified heated air

Cold outside air

Spent room air

up to 91% heat recovery

-  Save energy
-  Healthy living
-  Dampness protection
-  Noise protection
-  Security
-  Autonomous operation
-  Heat recovery
-  Intelligent control
-  Air filter included

GEALAN Home

APP CONTROL



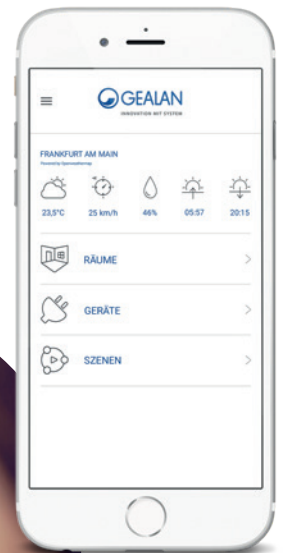
Autonomous operation

You can also let GEALAN-CAIRE® smart operate autonomously. In automatic mode, the sensor technology takes over: as soon as the humidity in your home is no longer within the ideal range, GEALAN-CAIRE® smart automatically begins to ventilate, removing moisture and supplying fresh, purified air - for a stable, healthy room climate without you having to think about ventilation. Even when you are not at home, your rooms will always be optimally ventilated.



App Control

Use the GEALAN Home App to control your GEALAN-CAIRE® smart ventilation system. There are several control modes to choose from: either you let the unit operate automatically according to a preset parameter (automatic level) or you control it individually. To connect your smartphone to GEALAN-CAIRE® smart wirelessly, simply switch on the fan's WLAN, scan its barcode or enter your SSID in conjunction with your password. You can then access all functions and control the ventilation system comfortably and without touching it. In addition, you will be shown additional information about the temperature and humidity in your rooms.





Easy smart home integration

GEALAN-CAIRE® smart can be easily integrated into your smart home system. Have you been showering for a long time and immediately need a stronger ventilation performance? Do you want your rooms to be intelligently ventilated while you are on holiday? With GEALAN-CAIRE® smart, you simply control the ventilation through your smart home platform. You keep an overview of all aspects of your living quality, manage all functions centrally with just a few clicks or via voice control, and enjoy all the comforts your intelligent home offers you.

Interaction with existing components

No matter how smart your home already is or will be: GEALAN-CAIRE® smart gets on well with existing smart components. You create your personal “one app for everything” solution and integrate your GEALAN-CAIRE® ventilation system. Select rooms, devices, scenes or functional levels (ventilation, heating, light, etc.) and control how your ventilation system should work and interact with other elements according to your wishes. Interconnecting devices brings you convenience: the control is literally in your hands via your smartphone. The prerequisite for this is the additional use of a gateway from Mediola.





Active ventilation on every scale

GEALAN-CAIRE® MIKROVENT



Application range

GEALAN-CAIRE® MIKrovent is an active, decentralised ventilation system with recuperative heat recovery for installation on the exterior wall surface. In various dimensions, it covers a wide range of applications: from individual living spaces (e.g. children's rooms), object construction rooms (e.g. hotel rooms) and apartments, to houses and large spaces (e.g. schools). It can be integrated into existing or new buildings and does not reduce your window areas - a great advantage.



Layout and function

Ventilation is achieved via two air ducts which meet indirectly in the heat exchanger. Depending on the design, heat recovery is up to 95 %. GEALAN-CAIRE® MIKrovent has sensor technology that measures the temperature and humidity of the room air and VOC content (and optionally CO₂ content) and controls the ventilation accordingly. Filters remove harmful particles from the air. Quiet fans and a sound-insulating housing ensure acoustic quality. GEALAN-CAIRE® MIKrovent can be controlled automatically or manually.



GEALAN-CAIRE® MIKrovent 35

Available models

GEALAN-CAIRE® MIKrovent 35: Air flow from 10 to 35 m³ per hour. For individual residential rooms (e.g. bedrooms or children's rooms) from 20 to 25 m² and a maximum of two people. GEALAN-CAIRE® MIKrovent® 35 can also be optionally mounted directly on the window.

GEALAN-CAIRE® MIKrovent 60: Airflow of 30 to 60 m³ per hour. For 30 to 40 m² rooms (e.g. hotel rooms, offices) and a maximum of 3 to 4 people. Sensors measure not only temperature and humidity but also CO₂ and VOC content as an option.

GEALAN-CAIRE® MIKrovent 120: Airflow of 60 to 120 m³ per hour. For large rooms (e.g. nurseries or schools). Sensors measure not only temperature and humidity, but optionally also CO₂ and VOC content.



GEALAN-CAIRE® MIKrovent 60 / 120

-  Save energy
-  Healthy living
-  Dampness protection
-  Noise protection
-  Security
-  Autonomous operation
-  Heat recovery
-  Intelligent control
-  Air filter included

TECHNICAL SPECIFICATIONS

Manufacturer GEALAN Fenster-Systeme GmbH

Model	GEALAN CAIRE® >>>	... smart	... MIKrovent 35
			
Typ		Bi-directional ventilation unit	Bi-directional ventilation unit
Power Unit		Multi-level power unit	Multi-level power unit
Heat recovery system		recuperative	recuperative
Heat supply level		91 %	89 %
Volume flow in m³/h		4 - 40*	5 - 30*
Filter quality class		ISO Coarse 50% (G3)	
Optional pollen filter		ISO ePM2,5 70% (F7)	
Supply voltage in VAC		100/240	110/230
Operating voltage in VDC		24	12
Power consumption in W		35	20
Power consumption preheating in W		0	300
Sensors		Temperature, humidity	Temperature, humidity
Installation		horizontal / vertical	horizontal / vertical
Fan levels		5	5
Operation		Mobile app, button, external button	Remote control
Interfaces		WLAN, USB, RS 485*	
Dimensions in mm		910 x 126 x 70	1180 x 130 x 160

* depending on installation variant and fan stage

... MIKrovent 60

... MIKrovent 120



Bi-directional ventilation unit

Bi-directional ventilation unit

Multi-level power unit

Multi-level power unit

recuperative

recuperative

91 %

87 %

20 - 60*

40 - 120*

Fresh air PM 2,5 (F7) / Room air PM 10 (G4)

110/230

110/230

24

24

50

70

600

1200

Temperature, humidity, CO₂, VOC

Temperature, humidity, CO₂, VOC

vertical

vertical

Remote control

Remote control

1510 x 300 x 230

1510 x 300 x 230

GEALAN CAIRE® flex

Passive window rebate ventilator

Available in black and grey

Tested for the systems S 8000 IQ and S 9000 AD

Air flow rate up to 13 m³/h depending on the number of flex units per element and selected system

Sound insulation up to 43 db depending on number of flex units per element and selected system





Get started with **GEALAN-CAIRE®**

Learn more about ventilation on our website
www.gealan.co.uk

