

 Titon®

Air Comfort Control



INNOSOURCE
Energy, Ventilation & Acoustics

Air Comfort Control

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Innosource's Air Comfort Control (ACC) ventilation system was nominated for the Dutch Construction Prize in 2004, and was developed to create a comfortable and healthy indoor climate by ventilating homes and buildings in a controlled, efficient fashion. The ACC ventilation system is a decentralised, mechanical ventilation system that supplies filtered outdoor air to rooms individually and on-demand.

How does Air Comfort Control work?

The Air Comfort Control ventilation system consists of decentralised mechanical ventilation units (Sonair and Innoventus), a control panel and a mechanical extraction unit. Sonair and/or Innoventus are mounted in the living room and bedrooms, and the mechanical extraction unit is usually mounted in the attic and connected to ducting used to extract stale, moist air from the wet rooms.



Innoventus



Sonair

Air Comfort Control is controlled automatically by a software programme in the control panel. The software programme is delivered with a standard programme, which essentially ventilates the living room more during the day and less during the night, and the bedrooms more during the night and less during the day, and thus saves energy. The software programme can be changed according to personal preferences.

Carbon dioxide sensors can also be used to control Air Comfort Control, making the system even more efficient. Carbon dioxide sensors measure the concentration of carbon dioxide in the rooms and ventilate rooms individually, if the concentration of carbon dioxide rises above a pre-specified level. Using carbon dioxide sensors not only saves energy, but guarantees indoor air quality.



Central Control Panel



CO₂ sensor

Energy efficiency

Air Comfort Control has been tested by Cauberg Huygen, an independent company specialised in environmental research. In The Netherlands, the integral energy performance of a new house can be expressed as an Energy Performance Coefficient. Buildings with lower EPC values have lower average energy consumption. The reduction in the Energy Performance Coefficient (EPC) of a home as a result of the installation of the Air Comfort Control ventilation system is 0.15 if the system is controlled by the software programme and 0.20 if the system is controlled by carbon dioxide sensors.

EPN, EPC and the Dutch approach

Energy conservation in buildings is expected to contribute significantly to the reduction of greenhouse gas emissions in The Netherlands. Energy efficiency policy in The Netherlands is ambitious both in terms of targets and available resources. Energy performance certification of buildings is a key instrument in this policy.

Dutch energy performance certification for new buildings: Energy Performance Standard (EPN)

- ⊗ Introduced in 1995. Mandatory part of the Dutch Building Code
- ⊗ The EPN enables the calculation of the integral energy performance of a new house and its heating, ventilation, air-conditioning and lighting
- ⊗ The EPN concerns both residential and non-residential buildings

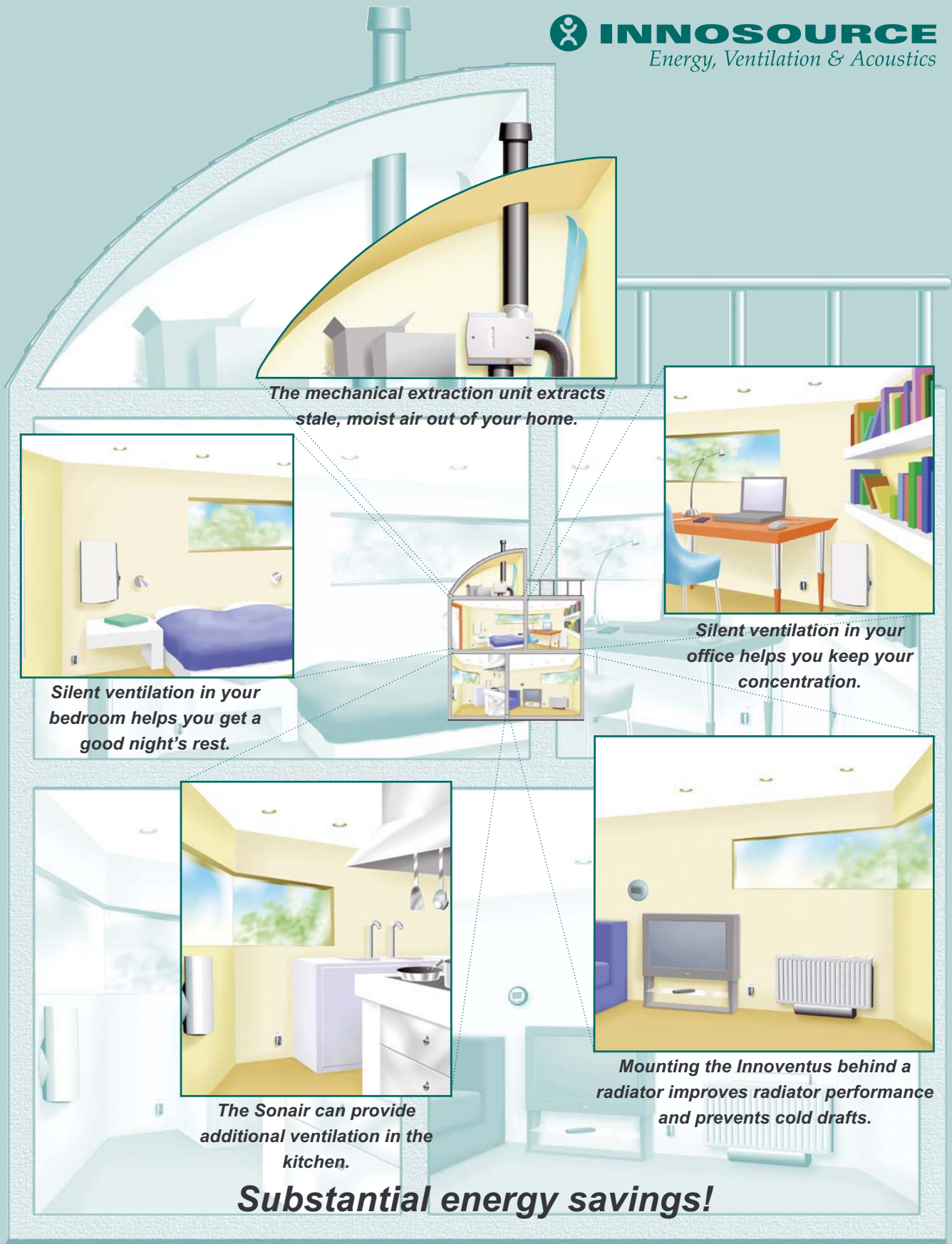
EPN calculates Energy Performance Coefficient (EPC)

- ⊗ The standard consists of a standardised method for the calculation of an EPC
- ⊗ The required EPC of new buildings has been steadily reduced from 1.4 in 1995 to 1.0 in 2000, and is planned to be reduced further to 0.8 in 2006
- ⊗ The energy consumption for houses with a specific EPC varies according to the number and behaviour of the inhabitants
- ⊗ Buildings with lower EPC values have lower average energy consumption

Easy installation and maintenance

Air Comfort Control is very easy to install and maintain, making it suitable for both new build and retrofit. Air Comfort Control communicates with the ventilation units and extraction unit via the electric ring mains, which means no extra wiring. The extraction unit is connected to ducting used to extract stale, moist air from the wet rooms, which means no extra ducting.

A typical system, consisting of 4 ventilation units, a control panel and extraction unit can be installed in 4 hours.



The mechanical extraction unit extracts stale, moist air out of your home.

Silent ventilation in your bedroom helps you get a good night's rest.

Silent ventilation in your office helps you keep your concentration.

The Sonair can provide additional ventilation in the kitchen.

Mounting the Innoventus behind a radiator improves radiator performance and prevents cold drafts.

Substantial energy savings!

Product characteristics

- ⊗ Ventilates rooms individually and on demand, and thus saves energy
- ⊗ Automatic control: programme or carbon dioxide sensor
- ⊗ Easy installation and maintenance
- ⊗ Communication via the electric ring mains, which means no extra wiring

Creative and Innovative

Innosource develops and produces innovative environment-friendly ventilation solutions for homes and buildings. Our mission is to give people control over their micro-environment and create a healthy and comfortable indoor climate.

Ventilation solutions with the right balance

Innosource is constantly searching for the right balance between health, personal comfort and the environment. Innosource is proud to contribute to a healthy and comfortable indoor environment and save energy at the same time.

Quality through Interaction

Innosource develops its products in close co-operation with universities, research centres, architects, consultants and public authorities. This interaction generates the best possible results and makes it possible to develop high quality products.

Service

Our commitment to high levels of service is recognised and appreciated by our customers and the users of our ventilation systems alike.

Worldwide

In the past few years, demand for Innosource products abroad has increased. We work closely with our partners inside and outside Europe to ensure that the benefits of our products can be enjoyed by all, even if this means adapting the product to comply with national standards.



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FAENT01.1

Technical specifications control panel

Installation

Connected to electrical ring mains. Height above ground 1.6 m. Diameter 100 mm. Depth 60 mm. Free space around control unit 30 mm.

Voltage

220-240 V ~ 50 Hz

Operation

Ventilation based on software programme in control panel, similar to thermostat, or carbon dioxide sensors. Programme can be changed according to personal preferences.

Technical specifications extraction unit

Dimensions

330 (H) x 340 (W) x 275 (D) mm

Voltage

220-240 V ~ 50 Hz

RPM

Variable, 300 - 3000

Sound production

13 dB(A) at 75 m³/h, 20 Pa pressure

29 dB(A) at 150 m³/h, 80 Pa pressure

35 dB(A) at 225 m³/h, 180 Pa pressure

Energy consumption

Max. 31 Watt at 225 m³/h 120 Pa

Maximum ventilation capacity

300 m³/h by 300 Pa

Technical specifications CO₂ sensor

Installation

Connected to electrical ring mains. Diameter 100 mm. Depth 60 mm. Free space around unit 30 mm.

Voltage

220-240 V ~ 50 Hz

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