

**WISE**

A complete solution for the optimal indoor climate



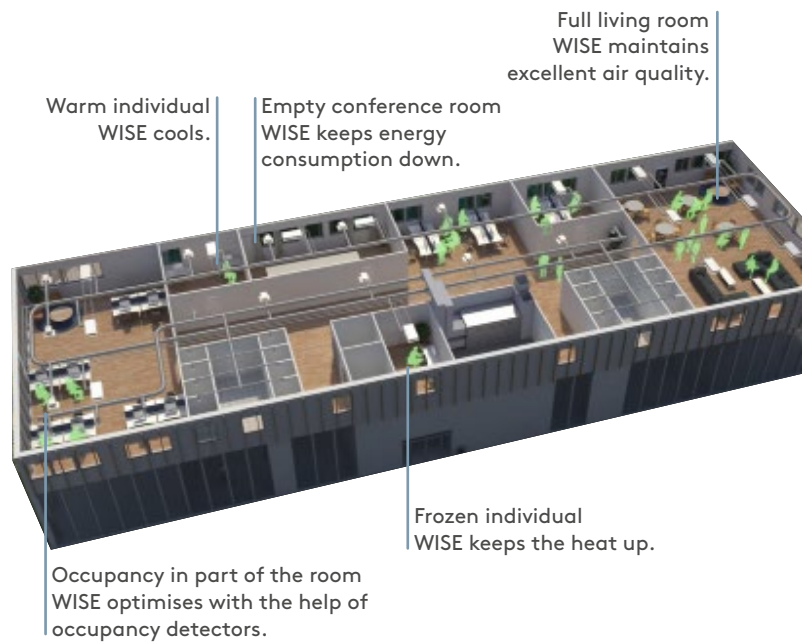
# WISE – A complete solution for the optimal indoor climate

## Full control

With Swegon's WISE system, you have full control over all the factors that affect comfort, performance and health. The complete solution for demand control of building systems for ventilation, heating and comfort cooling adapts the indoor climate to precisely the level required. This is possible through measuring and regulating based, among others, on occupancy, air quality and temperature. When people are in the premises, WISE ensures a good indoor climate, while energy can be saved when no one is there.

## Adaptable and future-proof

The WISE system and its component parts can be adapted quickly and flexibly for future needs. The products in the WISE system can easily change function or room association as required, and with wireless communication methods that do not require complicated and costly rerouting of communication cabling.



## WISE contributes to energy saving

Up to 80% energy savings for air handling.

Up to 40% energy savings for cooling and heating compared to basic ventilation.





# This is how WISE works!

## Step by step

### System selection

#### Simple construction of the WISE system

WISE gives you a choice of airborne and waterborne room products, or a combination of both. Use Swegon ESBO to verify your system choices.

### Operation

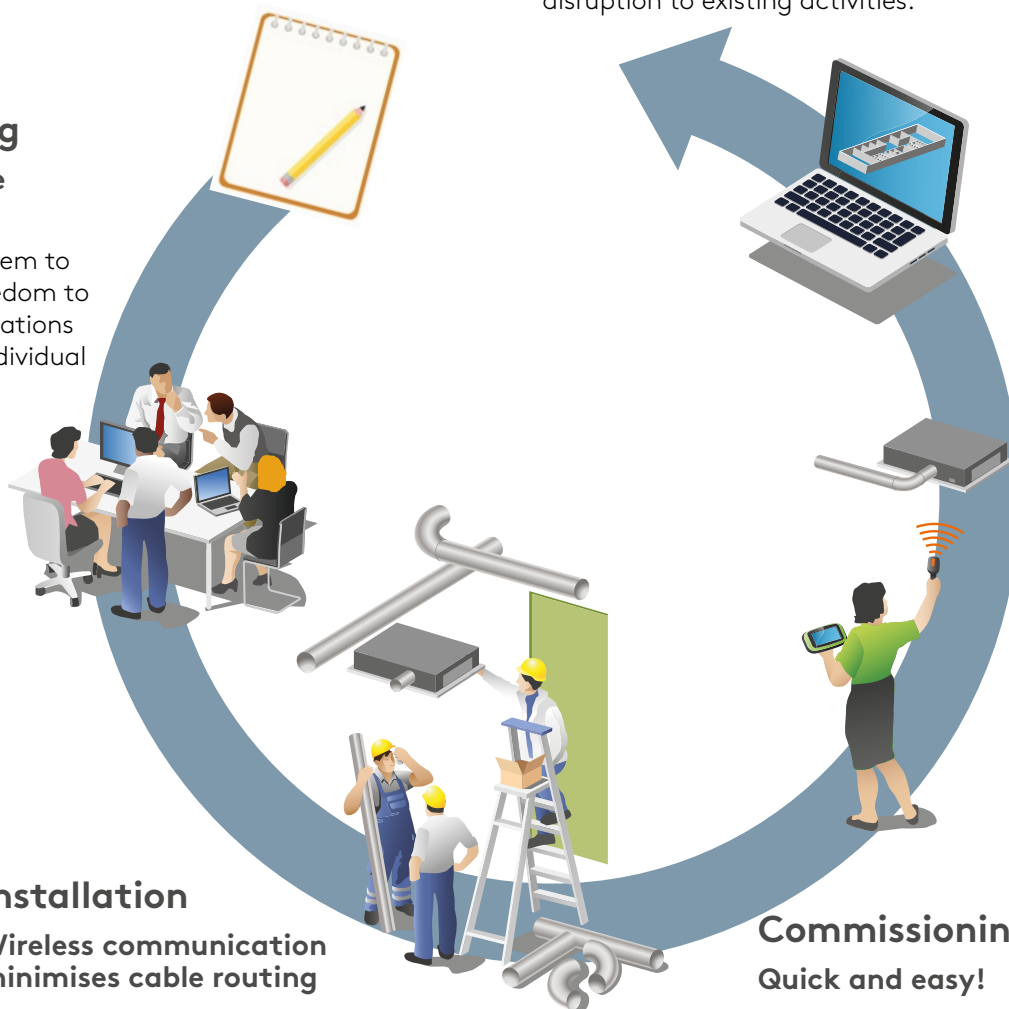
#### Flexible

The SuperWise interface gives you an instant overview and control over the entire system. If any system requirements need to be adjusted, for instance, if walls are moved or activities in the premises change, the system configuration can be altered. Product updates are sent out via the radio network with a minimum of disruption to existing activities.

### Project planning

#### Fully comprehensive solution

WISE is a complete system to give you maximum freedom to create the best combinations of products for each individual interior.



### Installation

#### Wireless communication minimises cable routing

Wireless communication between the products significantly reduces installation time and eliminates the risk of misconnections. Logistics throughout the building process are simplified, as no unique pre-configurations are required – all you need to do is install the right type of product in the right place.

### Commissioning

#### Quick and easy!

The system's components are digitally matched with the role they assume in the system. The first time the system is started, each component is configured automatically, which saves time and eliminates the risk of human error. Moreover, Swegon engineers will always be present for your system's commissioning to ensure that everything is running.

### Additional help

- I would like to know more about the WISE system in general
- I would like help to plan the electricity, water and air
- I would like detailed data for individual products
- I would like help early in the construction process to select the system type
- I want to check and see an overview of a specific WISE-system

- See the System Guide
- See the Project planning guides
- See the Product data sheets
- Log in to Swegon ESBO
- Log in to SuperWISE



# WISE products and accessories

## Wireless communication for easy system design

WISE provides maximum freedom to create the best combinations of products for each individual room. Instead of starting off with a number of components and trying to make these into a system, you create the system and choose products based on the need in each room and zone. This is possible thanks to our flexible products, wireless communication and through the SuperWISE user interface.

### Climate products

The WISE system's climate products handle air, heating and cooling for a perfect indoor climate. The products have integrated dampers for air regulation and they are "plug & play", i.e. the products have mounted actuators and valves, just install and connect!



#### WISE Parasol Zenith/WISE Paragon

Comfort modules that demand controls the air flow as well as cools and heats waterborne for the best energy efficiency and comfort. The comfort modules can be adapted and combined to meet comfort requirements in most projects, both now and in the future. A complete and flexible product with adjustable air distribution pattern – all accessories are factory mounted.



#### WISE Colibri C/WISE Lockzone C/WISE Kite C/WISE Sphere

Air diffuser for regulation of the air flow – variable alternative constant flow. Measures the current duct temperature and is equipped with sensor module WISE SMB for measuring the room temperature and occupancy in the room.



### Waterborne products

All Swegon's waterborne products can be integrated in the WISE system with the help of the factory mounted WISE IORE or WISE CU.

### Duct mounted products.

The WISE system has a complete range of duct mounted products for measuring and control of the pressure, flow and duct temperature.



#### WISE Damper

Damper that can be flow controlled, pressure controlled or have optimised functionality together with other products. Measures the current duct temperature. Can be supplemented with sensor module WISE SMA for air quality measurements in the duct.



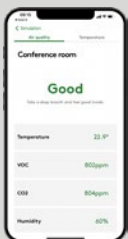
#### WISE Measure

Measurement unit with integrated air flow and duct temperature sensor.



#### WISE DPS

Pressure sensor to measure the pressure in air ducts.



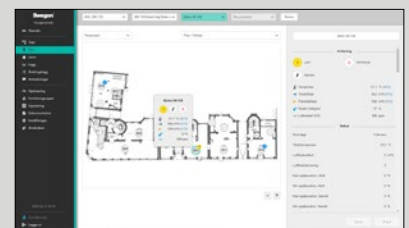
### App

Swegon makes the invisible visible with the Swegon INSIDE app. Swegon INSIDE app permits each user to control and monitor their indoor climate individually via the WISE system.



### System accessories

WISE has all the accessories required to measure and control the indoor climate, for more information see [www.swegon.com](http://www.swegon.com).



### User interface

SuperWISE is the WISE system's interface with which the user integrates and communicates with the system and its products. Here you'll find all requisite information, without it being complicated or confusing.



Waterborne office with setpoint selector switch and occupancy sensors for demand-controlled ventilation, cooling and heating.



Conference room with setpoint selector switch and demand-controlled air regulation as well as waterborne cooling and control of radiators.



Office landscape with demand-controlled air regulation with setpoint selector switch and control of radiators.



Classroom with demand-controlled air regulation, occupancy sensors and control of radiators.



Hotel room with setpoint selector switch, waterborne cooling and heating as well as demand-controlled air regulation. Key card holder for occupancy.





# Complete supplier

Swegon's technical departments with system technicians across the country help you to tailor the delivery of the WISE system and other products to satisfy the need in just your property. Swegon has all the component parts and the expertise required to create and control the best indoor climate, at a low energy consumption and life cycle cost.

## Project management for WISE

In each project with WISE, Swegon's project managers will ensure our system deliveries satisfy our undertaking towards the customer and other contractors in the building project. The role of the project manager is, together with the designers, to ensure that the design of the ventilation system meets the requirements for the desired function.

## Commissioning of WISE

Each WISE system is handed over to the customer commissioned and documented. Swegon's operating technicians will perform commissioning of all supplied Swegon products on site and coordinate this with the other contractors such as Ventilation, Electricity, Plumbing and Control and Regulation.

## System supplier

The WISE system can ideally be supplemented with other Swegon products for added functionality, where Swegon can be a turnkey supplier of the property's ventilation and climate products.

## Passive air diffusers, comfort modules, sound attenuator, etc.

The WISE system can also comprise rooms with passive products. Rooms can be designed as a constant flow room without active flow regulation or flow regulation via dampers (WISE Damper). Swegon also supplies other products necessary for good functionality in the WISE-system such as sound attenuators and air transfer diffusers, etc.

## Air handling unit GOLD

GOLD is the name of a series of complete air handling units for comfort ventilation in several sizes for air flows up to approximately 14 m<sup>3</sup>/s (50,400 m<sup>3</sup>/h). GOLD is available with a rotary heat exchanger, counter-flow plate heat exchanger or coil heat exchanger.



## High Efficiency Blue Box Heat Pump

The Blue Box 2 pipes heat pumps and 4 pipes multi-functional units provides the right cooling and heating capacity with a complete range of high efficiency and low GWP hydronic systems.



# References



## A Working Lab

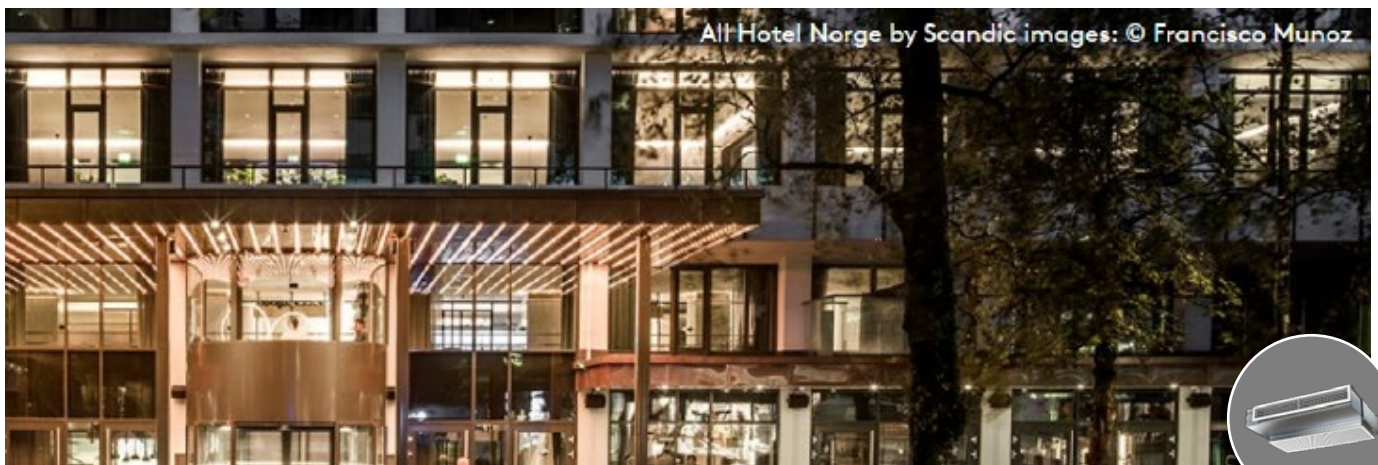
A Working Lab in Johanneberg Science Park in Gothenburg is a building that stands out from the crowd, both in terms of the building process and what it looks like. In 2019 Akademiska Hus opened the doors to its innovative office building or innovation arena as it is also called. The 11,700 m<sup>2</sup> building, A Working Lab in Gothenburg houses offices, co-working environments, conference and meeting rooms, a makerspace and a Learning Lab.



## Valle Wood

Valle Wood is a unique building in many ways. At the time of construction, Valle Wood was the largest commercial timber building in Norway. Valle Wood is certified in compliance with BREEAM Excellent - where WISE, of course, plays a contributory role. WISE is energy efficient and demand adapted, which contributes to the best possible indoor climate with the least possible environmental impact.

Credits: Lund+Slaatto Arkitekter



All Hotel Norge by Scandic images: © Francisco Munoz



## Hotel Norge by Scandic

Since Hotel Norge opened in 1885, it has gone on to become one of the most prominent hotels in Bergen, Norway. In 2018, the hotel reopened following full refurbishment, and now rebranded as Hotel Norge by Scandic.

Creating a pleasant indoor climate calls for a solution capable of balancing superior comfort with energy efficiency. The specifiers duly settled on WISE, which is an all-inclusive indoor climate system with flexible adaptations for achieving the perfectly balanced comfort level.

Connecting WISE to the hotel booking system made it easy to achieve the ideal indoor climate and to tailor energy consumption to demand. This delivers great benefits to the hotel, which can then reduce its energy bill if a room is unoccupied. When guests check in, the WISE system goes into operation, ensuring that the indoor climate has reached the desired level by the time the guest takes up occupancy of their room. In every respect, WISE is a flexible solution helping hoteliers create tomorrow's smart hotels.



Feel good **inside**

