

Our Reference:

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PM/ William Lawrance

## Swegon Covid-19 recommendation for air handling units.

The benefits of good ventilation and indoor air quality for comfort, health and productivity in both places of work and homes is undisputed. According to WHO “poorly ventilated buildings affect air quality and can contribute to the spread of disease”

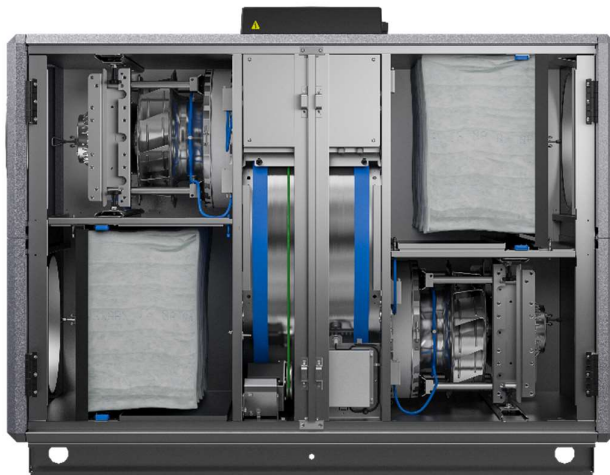
Other studies show that increasing the outdoor ventilation rate and minimising recirculation has a significant effects on reducing the spread of disease.

It is important that the ventilation unit is correctly set-up and well maintained. Follow the service routines provided. People servicing the unit should follow the hygiene recommendations given by the authorities. Wear protective clothing and wash hands after the work is completed.

To obtain the best indoor air quality we recommend that return air is minimised.

Some important measures are required to minimise air leakage in units with rotary heat exchangers.

To prevent the rotor from transporting air from the extract to the supply it is important that a purging sector is fitted. This is standard in Swegon GOLD, SILVER, COMPACT units



The function of the purging sector requires that the pressure difference is correct and that means, firstly, that the fans need to be correctly positioned so that they are both downstream of the rotor in their respective airstreams and, secondly, that the extract air is correctly throttled to create the correct pressure difference between extract and supply in accordance with our Installation instructions.

Swegon GOLD, SILVER C and COMPACT units with rotary heat exchangers are designed with the fans in the correct position and are fitted with purging sectors as standard. The rotor is well sealed both on the perimeter and across the diameter where the supply and extract airstreams are separated. Pressure measurement nipples are provided to make it easy to check the pressure balance and a pressure reducing perforated plate is included in the unit. This means that the leakage rate is less than 1% for both units with rotary and plate heat exchangers.

The GOLD unit control system features a special control function that we call “carry over control” that controls the rotational speed of the rotor when the airflow rate is reduced in variable air volume systems. This ensures the function of the purging throughout the operating range. Note that the factory setting is “off”

If not already running 24/7, we recommend that the ventilation is run for longer periods so that the building is well ventilated both before and after occupation.

Swegon is working with our branch organisations such as Eurovent to publish recommendations on internal leakage and work is continuing to get it full addressed in Certification and EN Standards.

## **In Short:**

Maintain good flow rates of outdoor ventilation with a minimum of return air

Service the units in accordance with the instructions and follow good hygiene practice

Ensure that units are correctly set to avoid any unintentional return air risk