

FOR THE BEST AIR QUALITY IN HEALTHCARE

One of the most challenging areas in air management is the healthcare industry. Hospitals, medical practices and nursing homes have particularly special requirements on the equipment and performance of ventilation and air conditioning systems. The needs of a wide range of people, departments, wards and work areas must be taken into consideration. The focus is always on hygiene and safety, because precise ventilation including air conditioning has been proven to contribute to better recovery.

TROX continues to set new standards in hygiene and quality. We have developed various effective solutions especially for the health care sector that are precisely tailored to the requirements of your premises.

OUR AIR MANAGEMENT ASPIRATIONS



- Ideal indoor air conditions for patients, visitors and staff
- Minimise the level of airborne microorganisms, particularly in protection zones
- Comprehensive, efficient solutions
- Sustainable concept for the protection of people and the environment
- Stringent observance of the strictest hygiene guidelines
- Maximum safety even in the event of fire thanks to fire dampers and mechanical smoke extract systems

WHAT YOU CAN EXPECT FROM US

- Best quality from the market leader
- Comprehensive and individual advice from the start
- All system components from a single source

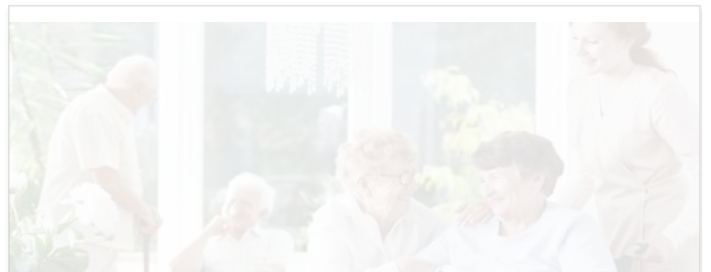
YOUR BUILDING – OUR COMPETENCE



HOSPITALS

To ensure that hospitals are a safe place for patients, visitors and specialists, it is important to take all available measures to minimize the risk of infection.

But how can we create the safest possible environment in which



ELDERLY AND NURSING HOME

People in retirement and nursing homes need to be particularly protected from infections. Close contact with residents, whether by nursing staff or visitors, poses a high risk of virus

disease transmission is hardly possible? The answer lies, among other things, in the air and therefore in the ventilation system.

Hospitals

transmission. But at the same time, contacts are vital; we all want to avoid renewed isolation and loneliness for our older relatives and fellow citizens.



DOCTORS OFFICES

Regular ventilation can effectively remove aerosols, but is often impossible: due to structural and thermal conditions, window ventilation only rarely provides the necessary air exchange.

In principle, installing a fresh air system is the optimal solution, but it often involves extensive construction work and high costs. Such a ventilation system continuously exchanges air and replaces used air with fresh air. The viral load and thus the risk of infection are reduced. In addition, the humidity and temperature of many systems can be regulated to create a comfortable climate. Odors and substances such as: B. CO₂ is kept at a low level, which also has a positive effect on the atmosphere in practice.

AIR PURIFYING OR FRESH AIR

Which is best for managing virus-contaminated aerosols?

Ventilating through windows helps, but is usually not enough. The necessary air exchange depends on the weather and the structural conditions. And comfort falls by the wayside in cold weather, not to mention rising heating costs.

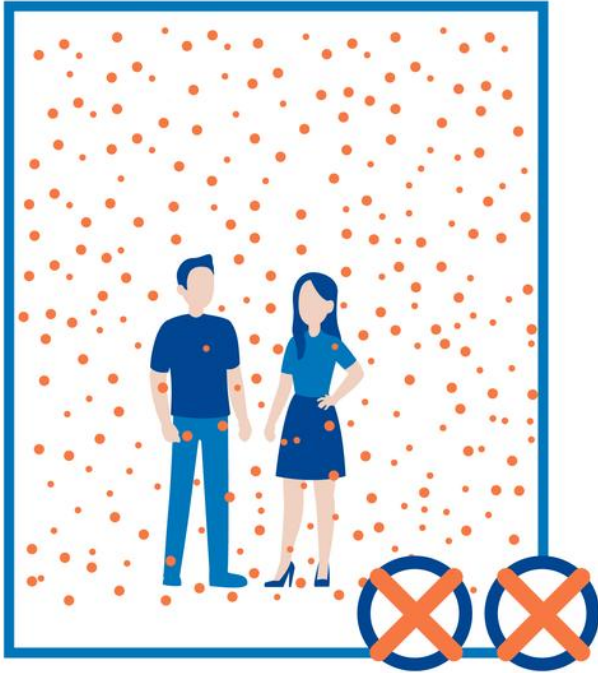
Decentralized ventilation devices with heat recovery ensure the necessary air exchange with maximum comfort. They safely remove aerosol-contaminated air and provide the room and residents with fresh air. These devices can be retrofitted into existing buildings with minimal structural work.

AEROSOLS: THE MAIN CARRIER FOR THE CORONAVIRUS

When people breathe or speak in closed rooms, tiny particles of liquid, referred to as aerosols, collect in the air. These aerosols can then transport the viruses. According to the Robert Koch Institute, this makes them one of the main carriers of COVID-19, because virus-contaminated liquid particles can often remain suspended in the indoor air for hours. But what best helps against this concentration of viruses in closed rooms?

WHAT HAPPENS IN CLOSED ROOMS WITHOUT VENTILATION?

Without ventilation

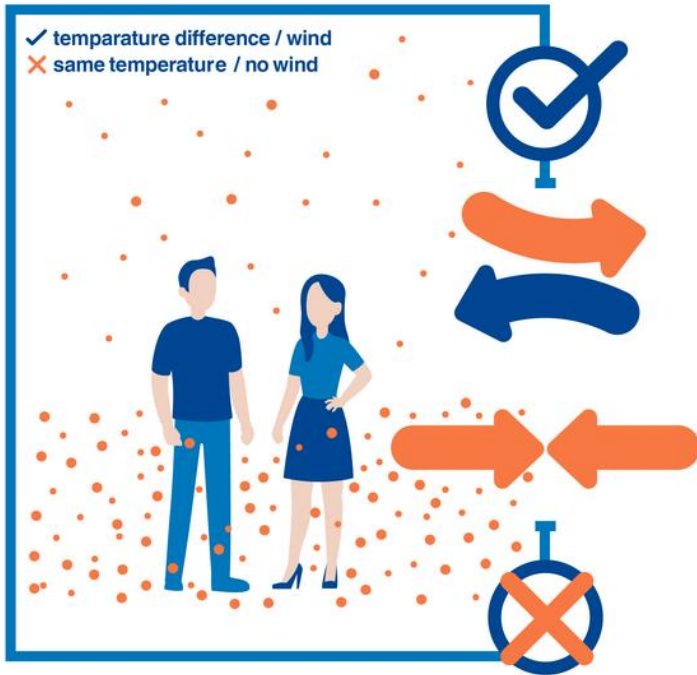


The aerosols distribute themselves throughout the room within a short time period.
If someone is infectious, the virus load in the room continuously rises.

This also increases **the risk of infection** to others.

WHY IS VENTILATION FROM OPENING WINDOWS INADEQUATE?

Window ventilation



Many rooms have too few windows for an adequate room air change rate.

Even under ideal structural conditions, wind and a large temperature difference between indoor and outdoor air are necessary for the air to be exchanged really effectively.

In winter, regular ventilation has a **noticeable effect** on the indoor climate and thus also **on heating costs**.

HOW CAN AIR CONDITIONING SYSTEMS INCREASE THE RISK OF INFECTION?

„Room air conditioner“ without filtration



Air conditioning systems without fresh air, without filters, or with only inadequate filters, do not reduce the virus load in a room.

Under certain circumstances, they may even spread viruses more quickly in the space through air movement.

WHY IS MECHANICAL VENTILATION SO EFFECTIVE?



Modern ventilation systems continuously replace stale air with fresh air.

The virus load, and thus the risk of infection, are reduced.

In many systems, humidity and temperature can be regulated to create a comfortable climate for people.

In addition, the continuous supply of fresh air keeps unpleasant substances such as CO₂ at the lowest possible level, which has a very positive effect on concentration, learning effectiveness, productivity and health.

ACCURATE HYGIENE STANDARDS: VITAL IN THE MEDICAL FIELD



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Where many people are coming and going, there is a high potential for germ contamination. Accordingly, it is important to contain the transmission of bacteria and viruses in healthcare facilities as best as possible.

Currently, the Corona pandemic also makes it necessary to establish measures that go beyond basic hygiene. It is important to note that pathogens are not only transmitted via direct contact, but often also by air.

Especially for the health sector and the hygiene standards that apply there, we go one step further in terms of hygiene and quality.

IN THE EVENT OF FIRE: SAFETY OF PATIENTS, STAFF AND VISITORS



Especially in hospitals, medical practices and care centres, there are many people who are in poor health and have limited mobility.

For TROX, it is therefore a matter of course that life-saving equipment must be protected, and escape routes must remain clear.

The prime objective in the event of a fire is to avert danger, i.e. to save lives and to protect property. We also always keep an eye on the complexity of the special building systems.

YOUR PERSONAL CONTACT



I WILL BE HAPPY TO ADVISE YOU.

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TROX ACADEMY – OUR HEALTHCARE WEBINARS



Air quality as an important hygiene and safety aspect can be positively influenced with correspondingly prudent and individual design. We would like to introduce you to the basics of ventilation and air conditioning technology and special requirements in the healthcare sector in a simple way.

With the TROX ACADEMY, our experts offer comprehensively prepared seminars on all topics relating to indoor air in the healthcare sector, both for basic knowledge building and for specific questions.