

SENSITIVE AREAS IN HOSPITALS

There are many sensitive sections inside medical buildings. According to DIN 1946 Part 4, they belong to room class II and include all non-public areas, such as

- Patient rooms
- Treatment rooms
- Rooms in the normal care
- Examination and recovery rooms
- MRI and CT rooms
- Corridors
- Storage rooms

Hygiene and safety aspects are strictly regulated here to protect patients and staff. Various requirements are also placed on the indoor air. In contrast to critical areas, temperature and humidity control and the reduction of potentially infectious aerosols are of primary importance in sensitive areas. The latter has become particularly relevant in the wake of the COVID-19 pandemic.

As a pioneer in the industry, TROX has dedicated itself intensively to the filtering possibilities of aerosol contents. We offer customised and safe indoor air concepts for all sensitive areas of healthcare.

YOU CAN COUNT ON US

HYGIENE AND SAFETY

Always new innovations in ventilation technology for critical and highly sensitive areas

ENERGY EFFICIENCY

Benefit from the enormous further development of ventilation and air conditioning systems!

WHY TROX

Personal advice from the innovation driver of the indoor air industry

YOUR ROOMS – OUR SOLUTIONS



ER

The central emergency room (ER) is a primary point of contact for patients in need of acute care. Lives are saved here every day.

While the number of cases has risen steadily in recent years (source: Ärzteblatt), many people have concerns about visiting an ER because of Sars-Cov-19. The reason: patients who stay there are often already ill – and thus may carry potentially dangerous germs and viruses. Their breathing alone produces aerosols that transport the corresponding pathogens into the ambient air and can lead to the infection of other people. This is precisely where a correspondingly great challenge lies for air management.

In addition, the indoor climate in this area of the hospital is characterised by interior rooms, numerous medical devices with high heat loads and often an insufficient air supply from outside. In the warmer months, the room climate in the ER is also under particular strain due to a large number of patients. In winter, on the other hand, draughts and unwanted cold must be prevented indoors.

The following is therefore vital for a pleasant room atmosphere:

- A sufficient supply of outdoor air
- Temperature and humidity control
- Maintenance of air quality through filtration and airflow
- Airlocks in the passageway for the patients arriving in the prone position

If these criteria are met, the indoor climate in this usually hectic zone of the hospital contributes positively to the recovery of the patients, as well as creating a pleasant working atmosphere.

Together with us, find the best solution for your emergency room in terms of ventilation and air conditioning technology



PATIENT ROOMS, NURSING WARD AND RECOVERY ROOMS

In rooms where patients spend longer periods of time, high air quality is not only pleasant, but also beneficial to health. Bad odours and stagnant or stale air are noticeable and make visitors and staff uncomfortable.

In this context, precisely coordinated ventilation and air conditioning can even contribute to a faster recovery and thus accelerated discharge of patients from hospital.

Furthermore, clean air has a positive effect on the working atmosphere of healthcare professionals and thus brings a potential increase in productivity. Considering these two factors, a well thought-out indoor air concept contributes greatly to efficient hospital operations. For this reason, individually suitable indoor air solutions are particularly important in sensitive areas such as patient rooms, examination rooms, nursing wards and recovery rooms.

The tasks of a corresponding system essentially consist of the following points:

- Turbulence-free air exchange
- Humidity control
- Fresh air volume flow rate according to the specific room use
- Room temperature between 22°C and 26°C

With suitable elements such as HEPA filters, the risk of infections caused by aerosols is also minimised.

Let our industry experts advise you on the most efficient ways to help your patients breathe easier.



STORAGE ROOMS

Storage rooms, such as those used to stock medicines, are by no means exclusive to hospitals, but can also be found in pharmacies, doctors' surgeries and nursing homes.

Most preparations can be stored at room temperature between 15°C and 25°C without risking loss of efficacy. However, there are also substances that require refrigeration, such as insulin, vaccines or certain eye drops, which require permanently cool storage (between 2°C and 8°C)

Moreover, it is not only medicines that require appropriately safe and air-conditioned areas for storage. With regard to rising temperatures in summer and condensation, for example, the topic of indoor air takes on an important role with regard to textiles, among other things.

In addition, occupational health safety aspects must be observed, especially in disinfectant and solvent storage facilities.

The following points are of central importance for the indoor air, depending on the stored items:

- Constant room
- Humidity control
- Protection against light

With TROX, you can store your medicines and other important products optimally and safely, even when outside temperatures fluctuate.

YOUR PERSONAL ADVISOR



I AM HAPPY TO ADVISE YOU.

Whether new construction, design, optimisation, system expansion, refurbishment or maintenance – TROX is at your side. Describe your specific needs to us or arrange a non-binding consultation.

Patric Unterdorfer
Global Key Client Manager Pharma & Food
You can reach me at: +49 (0) 2845 202 1128

ZONE-DEPENDENT VENTILATION MEASURES IN HOSPITALS

	Mechanical ventilation	HEPA-air filtration	Temperature control	Humidity control	Room pressure control
Public areas					
Sensitive areas					
Critical areas					

Due to Covid-19

Get an overall impression of the sizing and design of ventilation and air-conditioning systems in the healthcare sector.

You can already make a rough distinction on the basis of the adjacent table.

This page contains all information about sensitive areas in the hospital. Of course, we also provide appropriate guidance on [critical areas](#) and [public areas](#) on our website.

DETAILED DESIGN AID

And finally, our comprehensive table shows readers **design information** on the most important ventilation and air conditioning parameters for healthcare.

Download our practical design aid [here](#)