COVID-19: computer simulation minimises risk of infection

Companies are legally obliged to implement protection measures for their employees, customers and clients before recommencing and continuing business operations (Section 618 (1) German Civil Code [BGB]; Section 3 German Occupational Safety and Health Act [ArbSchG]). Rules of conduct and simple hygiene measures only provide limited protection, so employers and operators of facilities accessible to the public need to adopt additional measures.

With almost 30 years’ experience, TECOSIM is a technology leader in technical computer simulation. The company has now developed a method which provides a realistic prediction on the spread of aerosols and, consequently, the risk of Covid-19 infection from droplets in a virtual computer simulation. This prediction can be used to derive valid measures and verify that these measures minimise the risk of infection.

Examples of its use include office spaces, canteens, concert halls, public buildings, and care and medical facilities.

An open-plan office was used as an example to show that, paradoxically, typical ventilation concepts massively increase the risk of Covid-19 infection. The method developed by TECOSIM ensured partition positions and the ventilation strategy were optimised within a few days, thus demonstrably reducing the potential viral load by 70 percent.

This method and the optimisations it identified ensured business operations could be resumed weeks earlier than they would be otherwise.

Use our method to guarantee greater protection for your employees, visitors and customers.
We will take care of optimisation and, if you wish, the implementation of measures.

TECOSIM – proven protection against infection.