

## UV disinfection in the Franciscan High School

Franziskanergymnasium Kreuzburg in Großkrotzenburg - in the fight against the virus

Viruses, bacteria and other microorganisms spread through tiny water droplets in the air, so-called aerosols. They can survive there for a long time and are transmitted from host to host. The risk is particularly high in rooms with many people - such as waiting rooms, offices, gyms or classrooms in schools. Often, the situation is aggravated by the fact that these rooms cannot be well ventilated or there is no central ventilation. Especially in winter, ventilation is also unpleasant: ideal conditions for viruses.

UV-C light is energy and very effective against viruses, bacteria and fungi. Especially viruses, such as the SARS-CoV-2 virus and its mutations are easily destroyed by it. They have only a thin lipid (fat) layer. This is easily penetrated by UV-C light and destroys the virus immediately.

While the school year was still in session, Franciscan High School equipped itself for a safe start to the new school year. A total of 18 Soluva Air W units for air purification reinforce the conventional hygiene measures.

Regular disinfection of indoor air is particularly helpful in places where it is impossible or difficult to ventilate. It is also particularly important in rooms that are constantly used by different groups of people. At Franziskanergymnasium, the UV air purifiers are now working in classrooms, the teachers' lounge, the chemistry and physics rooms, the music room and a lounge for children waiting for their school bus or train. By the end of the school year, students and teachers were able to get their first experience, and it became apparent that the Soluva Air W units operated so quietly that classes were not disrupted.

**"We were able to simply plug the units into the wall outlet," says Bernward Bickmann, executive director of the school board, "It was also important to us that our janitor didn't have to do regular filter changes, unlike with HEPA filter units."**

The UV-C light from the long-lasting UV lamps in the Soluva air purifiers destroys viruses instantly. HEPA filter devices, on the other hand, collect viruses from the air stream in filters that must be replaced over and over again.



The renowned Fraunhofer Institute for Building Physics has for the first time confirmed the effectiveness of air disinfection by means of closed UV-C air purification devices under real conditions for a classroom on the basis of an elaborate scientific application test. Heraeus UV-C air purification devices can reduce the virus load in closed rooms by over 99%.

The disinfecting effect of UV-C light has been confirmed in further tests, e.g. with the Hygiene institut biotec or the University Hospital Tübingen.

**Advantages of UV-C air purification with Heraeus Soluva equipment:**

- ✓ free from chemicals
- ✓ without filter
- ✓ low maintenance requirements
- ✓ without ozone and by-products
- ✓ no uncontrolled escape of UV-C-light
- ✓ no germ resistance formation

