UV-C Light Joins the Fight to Combat COVID-19

International experts are now turning to a wider multi-layered approach for fighting the COVID-19 pandemic. In addition to vaccination, PPE and social distancing, UV-C light for air and surface disinfection in buildings is now being included in the pandemic fighting toolkit.

UV-C LIGHT DISINFECTION

A recent surge in research on the effectiveness of UV-C light for disabling the COVID-19 virus has provided the confidence for many institutions and businesses worldwide to proceed with UV-C installations. Clinical applications such as hospitals are the early adopters of UV-C disinfection to combat COVID-19, followed closely by schools, offices and other interior sites of congregation.

UV-C TECHNOLOGY IS PROVEN

UV-C light technology is not new. There is a long history of safe and effective UV-C disinfection, with over fifty years use in professional applications such as municipal water systems, food processing and building HVAC systems. Traditional technology low-pressure gas-discharge lamps are the primary UV-C light source, as LED UV-C devices with sufficient power to be effective in professional applications are still on the horizon.

UV-C APPLICATIONS

The predominant UV-C application is air disinfection for 'upper room air' treatment, with UV-C light disabling the virus in the air located at the top of the room while the conventional ventilation system circulates the air. For some applications, 'closed air' disinfection techniques using portable floor-standing devices are proving to be effective. Disinfection of wall, furniture, and fixture surfaces within rooms can be achieved with directional UV-C light delivered by wall or ceiling fixed luminaires or by portable floor-standing devices.

UV-C SAFETY

In all instances, application safety is critical, as UV-C light is invisible, and if applied without suitable design and safety expertise can cause damage to the skin and eyes of humans and animals. With surface disinfection there are other safety caveats including potential dangers such as premature aging of plastics, fabrics and surface materials. Accessing design expertise and applying operational safeguards from trusted suppliers is paramount.

BUSINESS OPPORTUNITIES

Retrofitting of institutional and commercial buildings with UV-C equipment is a prime business opportunity for suppliers and contractors. UV-C light installations are very easy to retrofit compared with the systemic work required to upgrade core HVAC building services.
It is apparent that COVID-19 or any subsequent viral evolution is not going to disappear anytime soon, so it is likely that UV-C methods for minimising the spread of the virus will be in demand for many years to come.

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