

UV-C Disinfection



Severe Acute Respiratory Syndrome or widely known as SARS spreads easily through the air conditioning system. Light droplets of infected mucus or saliva is destroyed when it passes through the air conditioners which are protected by UV-C germicidal lamps before it reaches victims at close proximity.

How does UV-C kill dust mites?

The UV-C (ultraviolet-C) spectrum at 253.7nm which is also called the germicidal wavelength is able to eliminate dust mites. It does this by deactivating the DNA of the dust mite and prevents reproduction. UV-C light at 253.7nm causes cell death in the dust mite and prevents the DNA from being unzipped for replication. A quartz lamp transmits more than 94% of the crucial 253.7nm UV-C wavelength. The quartz lamp also produce more UV-C because of higher transmission and thus is more effective in killing mites.



The Role of UV-C on Allergy & Sinusitis

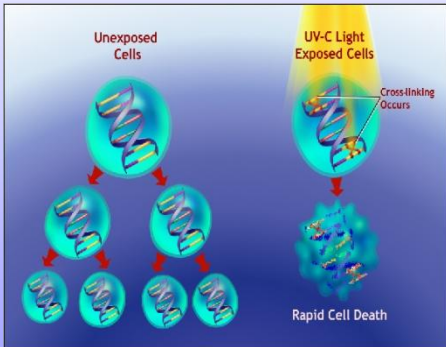
Destroys micro-organisms. UV-C light is scientifically proven to destroy a large variety of contaminants, including disease-causing viruses, bacteria and fungi (including moulds). UV-C light air purification has been used for years by the medical field (including hospitals) to sanitize rooms and equipment, in order to prevent the spread of illness and disease.



The Effects of UV-C on Tuberculosis

Airborne transmission of *Mycobacterium tuberculosis* and other infectious agents within indoor environment has been a recognized hazard for decades. One application of UV-C is to irradiate the upper part of a room while minimizing radiation exposure to person in the lower part of the room. UV-C has the potential to be a useful engineering control for TB. The 1994 CDC TB Guidelines (Center for Disease Control and Prevention 1994) relied primarily on upper-room air UV-C studies for over 30 years. UV-C was very effective at inactivating airborne bacteria.

“The sun bombards the atmosphere with Ultraviolet energy destroying contaminants in the air. This process is how the sun naturally purifies the air we breath. UVmax™ makes that same process possible indoors”



In Ultraviolet family, Ultraviolet-C is the most effective in killing pathogens and microorganisms due to its 253.7nm wavelength which is lethal to germs, bacteria, viruses, moulds, mildew, pollen spores, etc. Ultraviolet-C alters the DNA structure and demolishes the normal system of microorganism, thus disabling multiplicity. This concept is applied by us to protect you from this silent and dangerous airborne microorganism killer in your surrounding area and in the air we breathe every second emitted by the air conditioning system either in your homes or offices.

Our technology is the same as sunlight, only 2500 times more potent!

“We spend 90% of our time inside buildings, and experts say 90% of air pollution is inside buildings. Many air conditioning systems have the ideal conditions for the growth of bacteria, moulds, and other hazardous air pollutants and allergens.”

UVMax™ System :

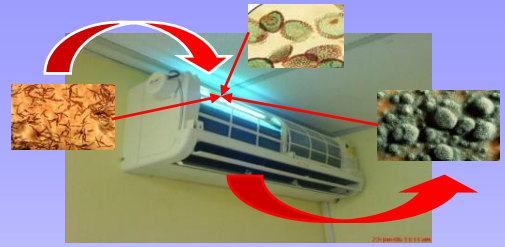
Disease Protection - UVmax™ protects us from any airborne microorganisms such as bacteria, germs, viruses, moulds, pollen, etc by destroying the DNA's structure of microorganisms.

Clean A/C System - UVmax™ breaks the airborne particles and destroys all contaminants with Ultraviolet-C in the cooling coil and ducting keeping it clean and dust-free for a year without any maintenance needed.

Eliminate Odors - UVmax™ kills pathogens, germs, bacteria and moulds that causes bad smell and makes the air in your rooms smell fresh and clean while producing ZERO ozone. No more mouldy smell from your air conditioner.

Control Disease - UVmax™ helps stop the spread of disease and sicknesses for example influenza, tuberculosis, allergies, etc.

Cost Saving - UVmax™ eliminates mould, algae, slime, and gel formation that can plug the coil, inhibit air flow, increase cooling costs and electricity costs.



Our UVmax™ system purifies and sanitizes all the air in the building constantly, 365 days per year. Duct cleaning or sanitizing lasts only one day and does not purify the air. Remember that dirty air makes dirty ducts and dirty ducts produces dirty air.



Specifications



UVmax™ SM212 cassette unit for 1hp air conditioning system

UV Intensity : 18,000 $\mu\text{w}/\text{cm}^2$
Power consumption: 6W
Dimension: 9" (23 cm)

UVC wavelength : 257.3 nm

Bulb Lifespan: 9,000 hours operational

Energy used : >99%

Power supply : 240V / 50Hz



UVmax™ SM313 socket unit for 1.5hp and above air conditioning ducting system

UV Intensity: 24,000 $\mu\text{w}/\text{cm}^2$
Power consumption : 9W
Dimension: 9" (23 cm)



UVmax™ SM14 wall-mounted unit for air conditioning ducting system

UV Intensity : 24,000 $\mu\text{w}/\text{cm}^2$
Power consumption : 15W
Dimension: 17" (43 cm)



UVmax™ SMT8 UVC for HVAC – Double-ended high output germicidal lamp

UV Intensity : 80,000 $\mu\text{w}/\text{cm}^2$
Power consumption : <30W
Dimension: 35" (88.9 cm)

Installation photos



For more information please contact:-



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