

## UV - DUCT - SQ UV - DUCT - SQ - UL disinfection system for HVAC



### WHAT ARE UV-C RAYS?

Light in a broad sense can be divided in visible, infra-red and ultraviolet rays.

Ultra-violet rays (invisible) can be classified in:

- UV - A (with tanning properties)
- UV - B (with therapeutic properties)
- UV - C (with germicidal properties)

The germicidal effects of the UV-C radiation destroy DNA of Bacteria, Viruses, Spores, Fungi, Moulds and Mites avoiding their growth and proliferation.

UVGI technology is a physic disinfection method with a great costs/benefits ratio, it's ecological, and, unlike chemicals, it works against every microorganisms without creating any resistance.

Applied inside ducts, or inside AHU (Air Handling Unit) UV-DUCT-SQ creates an "UVGI section" that inhibits the proliferation of viruses, bacteria, moulds and spores settling inside Air Conditioning Systems, and very dangerous for health.

UV-DUCT-SQ is very versatile and its shape has been designed to adapt quickly to different applications; UV-DUCT-SQ is a modular system that can be mounted by itself or combined with other modules side-by-side, overlapping, etc.; it purifies homogeneously the airflow running through its powerful lamps, eliminating the microbial load and the spreading and distribution of dangerous and annoying pathogens inside buildings.

In AC systems an unpleasant biofilm covers usually all inner surfaces as the result of microorganisms combination and favourable conditions for their proliferation, such as temperature changes, high humidity and darkness. UV-DUCT-SQ inhibits the creation of this biofilm increasing Indoor Air Quality and comfort.

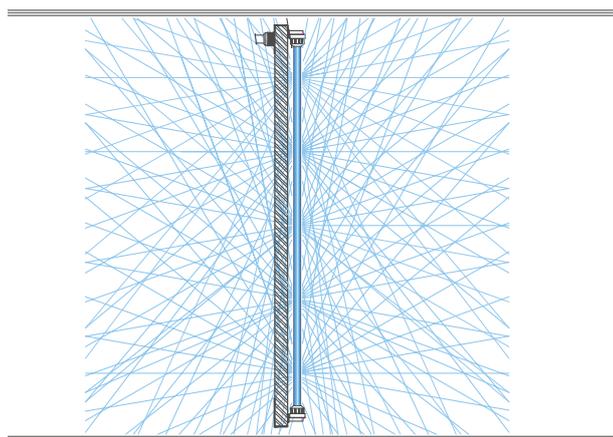
More specifically, the use of UV-DUCT-SQ eliminates important issues related to AC Systems such as deadly illnesses (Legionella Pneumophila, Tuberculosis, Flu, etc.) but also "Sick Building Syndrome", "Monday Fever", Asthma and Allergies. UV-DUCT-SQ allows also the control of Hygiene high standards in Food industry and fights against Healthcare Associated Infections (HAI) in hospitals.

UV-DUCT-SQ application is important not only for IAQ and health, but a cleaner AC system is also more efficient from an economic point of view, with less operative and maintenance costs. As a matter of fact, using UVGI the need of filters replacement and clean of inner surfaces is less necessary than usual.

With UV-DUCT-SQ you obtain a deep and continuous disinfection of your AC system, without the use of expensive and polluting chemicals, , in few words with UV-DUCT-SQ you have better comfort for people in the building, saving money.



A.H.U. Application of n° 3 UV-DUCT-SQ



Rays distribution.

#### TECHNICAL FEATURES

- Selective UV-C Light Progress lamps (emission peak at 253.7 nm.) high efficiency, ozone free, pure quartz.
- Body in STAINLESS STEEL AISI 304
- All materials are tested for resistance to intense UV-C rays.
- Waterproof and dust-proof (IP 55).
- Powered by electronic ballasts specific for Light Progress UV-C rays lamps.
- Supply Box with Synoptic view
- CE mark (LVD - EMC - MD - RoHS).

## UV - DUCT - SQ

alone, side-by-side, overlapping



Supply box

UV-DUCT-SQ family includes modules with 4 or 6 lamps, of different sizes and wattages, all in stainless steel. UV-C lamps are equispaced and positioned in a grid through which airflow in the duct is forced to move.

UV-DUCT-SQ has been designed to adapt to different sizes and ducts sections, placing one device to cover the surface or matching more devices together side-by-side, one on the other (overlapping), in series, etc. using scroll-in "U" profile, like filters.

Ballasts specific for Light Progress UV-C lamps, are inserted inside a SUPPLY BOX, IP55 insulated. They optimize lamps performance and durability.

UV-DUCT-SQ is made with high quality and extremely durable components, and works perfectly in difficult operating conditions (high humidity, low temperature, etc.).