



Sudhai AirTech Pvt. Ltd.

Innovating Air Technology

BROCHURE & IMPORTANT INSTRUCTIONS



SUDHAI U V C AIR CURTAIN

#startupindia



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CIN NO :. U29253MH2014PTC254628

With scientifically proven germicidal capabilities and 99.99%-100% surface kill rate via UVC or UVV/UVC bulbs, the SUDHAI UVC eradicates pathogens, Bacteria, viruses, reduces VOC odors, and provides the assurance of superior sanitation.

- No measurable UVC from the sun reaches the earth's surface. Because of the spectral sensitivity of DNA, only the UVC region demonstrates significant germicidal properties.
- Population growth compounded with rapid urbanization has amplified the potential for bacteria and viruses to spread quickly. UVC Air Curtain can improve indoor air quality and decrease infections.
- Sudhai has created an UVC air curtain by outfitting Air Curtain with the ability to better filter their operational air and even disinfect it entirely.
- The Sudhai UVC system- Using a special blue light inside the unit, a UVC-equipped Air curtain can actually disinfect and cleanse the air it uses.



HOW DOES UVC DISINFECTION WORK?

As evident by multiple research studies and reports, when biological organisms are exposed to deep UV light in the range of 200 nm to 300 nm it is absorbed by DNA, RNA, and proteins.

Absorption by proteins can lead to rupture of cell walls and death of the organism. Absorption by DNA or RNA (specifically by thymine bases) is known to cause inactivation of the DNA or RNA double helix strands through the formation of thymine dimers. If enough of these dimers are created in DNA, the DNA replication process is disrupted, and the cell cannot replicate.

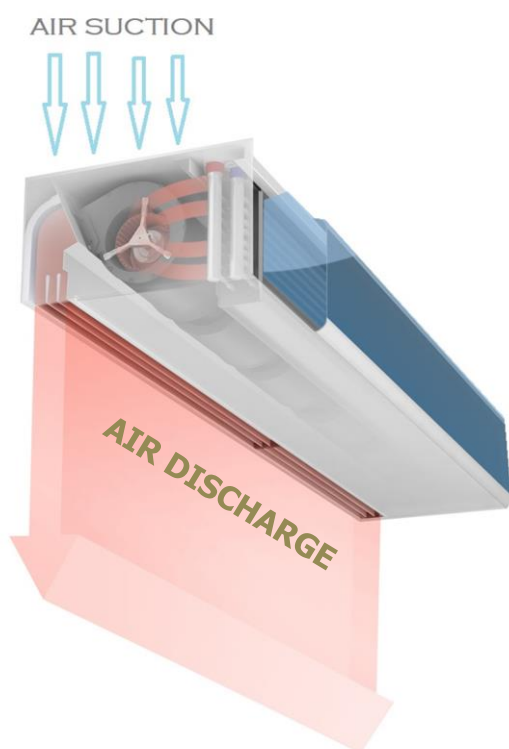


CELLS THAT CANNOT REPLICATE CANNOT INFECT.

It is widely accepted that it is not necessary to kill pathogens with UV light, but rather apply enough UV light to prevent the organism from replicating. The UV doses required to prevent replication are orders of magnitude lower than required to kill, making the cost of UV treatment to prevent infection commercially viable. The UVC in the Air Curtain inactivates the pathogens in the air while the circulation and provides continuous sanitation.

Sudhai UVC Series (Centrifugal blowers)

Model	Dimension (mm)	Air Velocity (m/s)	Air Volume (M3/hr)	Noise (dB)	Max Power Watt	Voltage (V)	Frequency (Hz)	Net Weight (Kg)
SUVC09 (3 Feet)	900 x 280 x 280	12-14	1950	45-60	187	220-240	50	20
SUVC10 (1 Meter)	1000 x 280 x 280	12-14	2150	45-60	187	220-240	50	21
SUVC12 (4 Feet)	1200 x 280 x 280	12-14	2450	45-60	187	220-240	50	23
SUVC15 (5 Feet)	1500 x 280 x 280	12-14	2700	45-60	250	220-240	50	26
SUVC18 (6 Feet)	1800 x 280 x 280	12-14	3050	45-60	250	220-240	50	29



- Centrifugal plenum Air flow system ensures uniform airflow completely concealing the UVC
- Helps in Bacteria & pathogen eradication
- Eliminates odors & odor causing bacteria
- UVC air curtain system can remove *and* effectively destroy E. coli bacteria from the air
- Studies have confirmed that UVC light can be effective for combating SAR S-COV.
- However, additional studies are needed to determine and confirm the specific dose response required to inactivate Covi d-19 on different surfaces and materials.
- Ultraviolet lights could reduce the spread of tuberculosis in hospital wards and waiting rooms by 70 percent

Philips TUV TL-D lamps for air disinfection offer best-in-class reliability used in Air Curtain

- Philips lamps are double-ended UVC (germicidal) lamps used in professional water and air disinfection units
- These lamps offer almost constant UVC output over their complete lifetime
- Short-wave UV radiation with a peak at 253.7 nm (UVC) for disinfection purposes
- Special lamp glass filters out the 185 nm ozone-forming radiation

I. UNCRATING THE AIR CURTAIN UNIT

Carefully opening the crating making sure that the box is in right position

Make sure of the position using the symbols present on the carton

Remove the thermacol stuffing and check for the wires and back plates

ACCESSORIES:

If the unit(s) were ordered with optional electrical accessories (door switch etc.), the accessories may be found in the carton containing the unit

Check all of the cartons/skids for accessories before discarding.

UVC is hazardous and the unit should be switched on only when installed as installation manual.

Direct contact with UVC is dangerous and should be completely avoided.

II. MOUNTING INSTRUCTIONS (General)

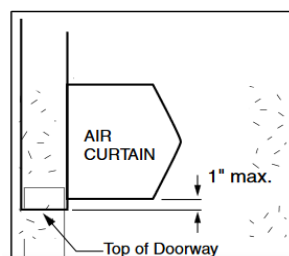
To achieve optimum protection, the unit should be mounted on the inside of the building, flush to the wall and as close to the top of the door opening as possible. To ensure peak performance, keep air stream free of obstructions.

Before mounting the unit, check the supporting structure to verify that it has sufficient load carrying capacity to support the weight of the unit(s). The mounting hardware should be capable of supporting a minimum of three (3) times the weight of the unit.

A. When determining the mounting location for the unit(s), make sure that nothing interferes with the curtain of air developed when the discharge vanes are directed downwards toward the door opening.

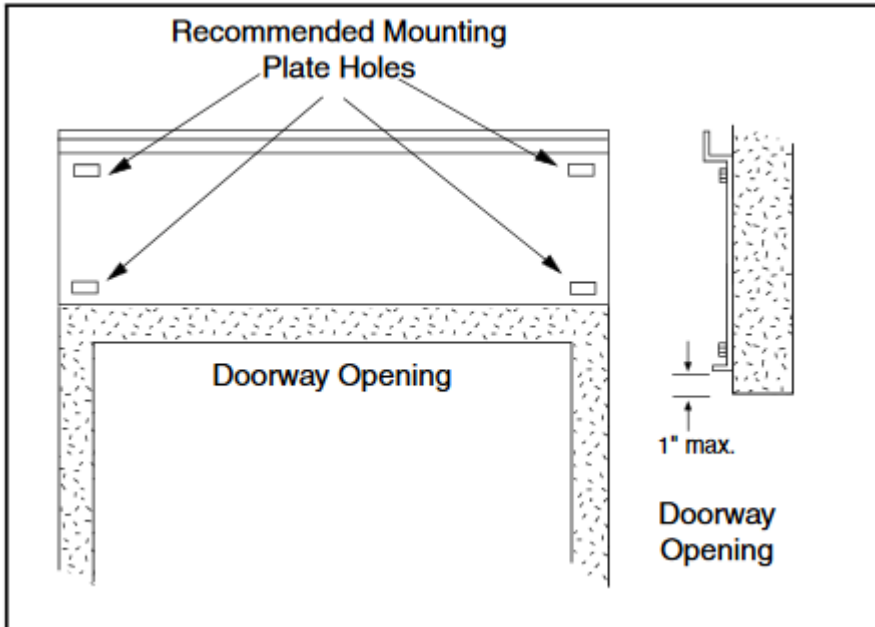
If the air stream strikes any obstruction (the top edge of the doorway, a door opening device, etc.), the effectiveness of the unit will be greatly reduced.

B. For optimum performance, the bottom of the unit (discharge nozzle) should be no more than 1" above the top of the door opening with the unit mounted flush to the wall.



III. WALL MOUNTING

A. Determine the location on the wall above the opening where the air curtain will be mounted. This location should center the unit over the opening and provide suitable mounting support. It is recommended to use at least four locations that correspond to the outer corners of the wall mounting plate.

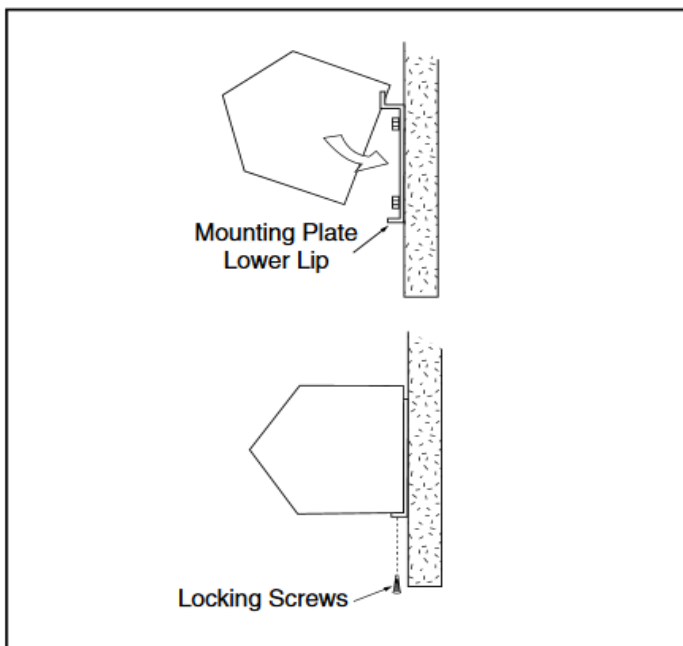


B. Prepare the wall as necessary for the wall mounting plate anchors.

C. Drill holes in the wall mounting plate to correspond to the locations on the wall.

D. Anchor the wall mounting plate over the door opening with the mounting tabs pointing upwards.

E. Raise the unit over the door (air nozzle facing down) and onto the mounting plate. Tilt the unit upward, matching the holes in the frame with the tabs on the mounting plate.



F. Lower the unit into place allowing it to rest on the mounting plate. The unit flange should rest above the mounting plate flange.

G. After the unit is securely seated to the mounting plate, install the locking screws along the bottom flange.

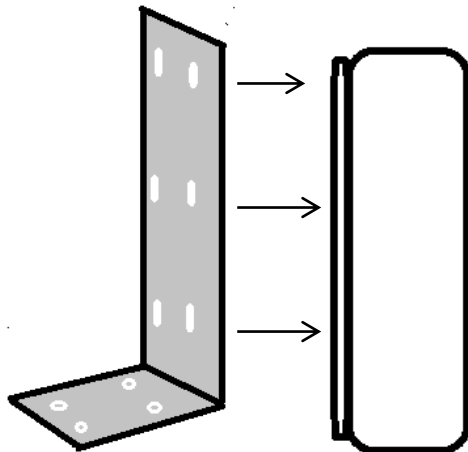
III. FLOOR MOUNTING (can be done in special cases)

Determine the location on the floor besides the opening where the air curtain will be mounted. This location should corner the unit besides the opening and provide suitable mounting support. It is recommended to use at least four locations that correspond to the outer corners of the wall mounting plate.

The L plate bottom has four holes for bolting, which should be properly bolted to the floor to avoid any vibrations.

The remaining procedure remains the same as the Air curtain back plate to be attached to this L-Plate as per above mounting instructions.

The machine to be installed to the opposite side to the L plate.



XI. WARRANTY

Sudhai Airtech Pvt Ltd warrants all new equipment to be free of defects in workmanship and material for a period of one years (1 years) from the original date of shipment, provided the equipment has been properly cared for, installed and operated in accordance with instruction

The Company will correct by repair or replacement, at its option and expense, any proven defects in said apparatus, subject to the above conditions, provided that immediate written notice of such defects is given to The Company. Repair or replacement will be made F.O.B. factory with any applicable transportation charges to be borne by the customer. Merchandise not of The Company's manufacture supplied in piece, or in component assemblies, is not covered by the above warranty, but The Company will give the customer the benefit of any adjustment as made with the Manufacturer.

This warranty is void if the apparatus has been tampered with in any way or shows evidence of misuse. The Company will not assume any expense or liability for repairs made outside its factory without proper written consent, nor for any transportation charges on apparatus returned to the factory without written authorization by The Company.

Nothing in the above warranty provisions, however, shall impose any liability or obligation of any type, nature or description upon Sudhai Airtech if Sudhai has not received payment in full for the apparatus in question.

LIMITATION OF DAMAGES

Notwithstanding anything to the contrary above, customer's exclusive remedy for any and all losses or damages resulting from the sale of The Company's equipment under this agreement, including but not limited to, any allegations of breach of warranty, breach of contract, negligence or strict liability, shall be limited, at The Company's option, to either the return of the purchase price or the replacement of the particular equipment for which a claim is made and proved. In no event shall The Company be liable for any special, consequential, incidental or indirect losses or damages from the sale of The Company's equipment under this agreement

ORDER NO

Model

Date of Dispatch