

APPLICATION GUIDE



AURA HEPA + UV

Healthcare and Medical Center

Areas requiring:

Airborne Infection Filtration
Negative Pressure Isolation Chambers
Nursing Care and Assisted Living Facilities

Safe Return-to-Work:

Reception and Lobby Areas
Offices and Meeting Rooms
Restaurants and Cafeterias
Daycare Centers and Preschools
Dormitories and Classrooms
Correctional Facilities

Any other areas requiring protection from airborne pathogens that can be spread via respiratory aerosol.



PURPOSE

Designed for zero leakage, the Multistack® Aura HEPA+UV Air Filtration units are specially engineered to allow for the flexibility of : Free flow, or multi breathing zone contaminated air capture connections, as well for free flow floor or ducted clean air exhaust connection for Negative Pressure Isolation Rooms.

AIR FLOW

The airflow arrangement of an Airborne Infection filter system is very important. In order to be efficient the unit air inlet has to be within proximity of the potential source of the contaminant, which is the breathing zone of the occupants,

CAPACITY

The minimum number of Air Changes required for recirculating non-ducted filtration units for infectious disease area is 12 ACH. The same number of air changes should be considered in the non-healthcare applications, requiring safe working conditions.

PROCESSES

The Multistack® Aura HEPA+UV air filtration unit is designed to remove pathogens and other contaminants from an incoming air stream **A**, by passing all the in-coming air **B** through the following stages:

1. a pre-filter rated MERV 8, and HEPA +UV
2. a HEPA filter rated 99.99% at 0.3 microns, and
3. a built-in ECM variable-speed fan.

Upstream UV irradiators irradiate both the air stream and the face of the HEPA filter. Downstream irradiators provide further air-exposure times.

The UV-C irradiators are designed not to produce ozone.

Optional -

4. When selected at time of order, optional 250-260 nm ultraviolet (UV-C) sterilizing irradiators can be provided either
 - i. up-stream of the HEPA filter, or
 - ii. down-stream of the HEPA filter, or
 - iii. both up-stream and down-stream of the HEPA filter.

Electrical Requirements:

120 VAC, 1 phase,	60 Hz
HEPA filter only	4.60
A HEPA filter plus UV	4.82 A
MCA	6.0 A
MOP	15 A

Notes:

1. Up to 1800 CFM
2. Cabinet joints and filter-mounts in the unit are designed for zero air leakage even with frequent re-location of the unit. The HEPA filters and frames are equipped with urethane gaskets and gel seals to prevent air bypassing the filter.
3. HEPA filters are certified to UL-900 and ULC-S111.

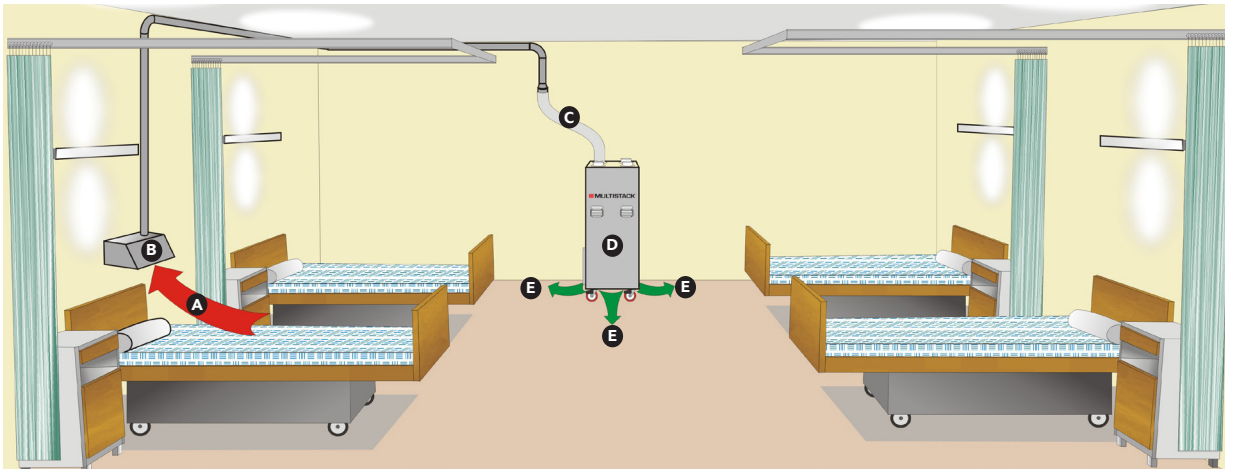
Disclaimer:

Where text suggestions, drawings, sketches, or other illustrations do not include accepted practice for social distancing or other means of contagion control, or for compliance with codes or other regulations, the accepted practice always takes precedence. Always use common sense when applying any product. Aura HEPA+UV air filtration unit is not a medical device.

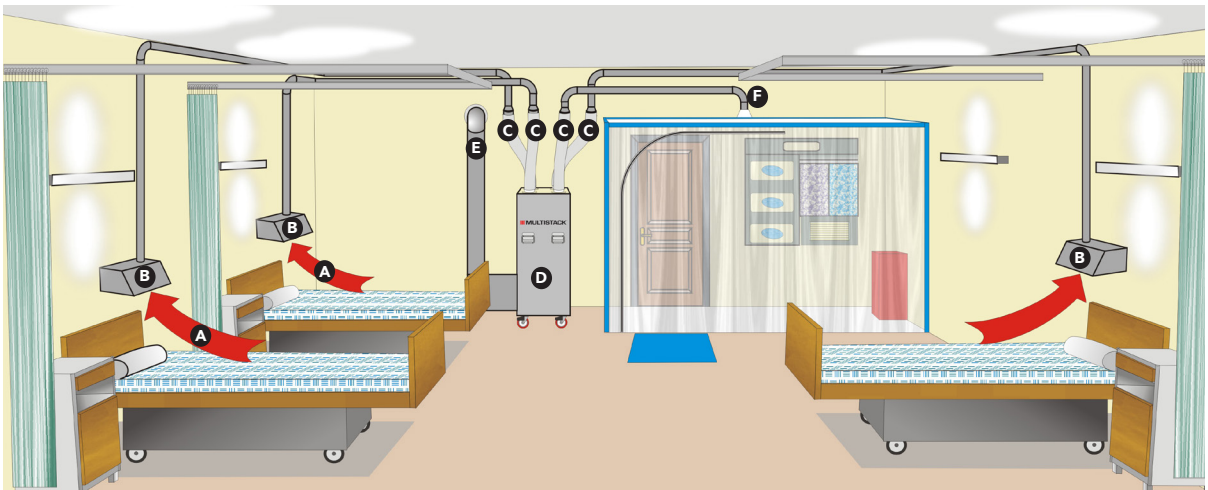
HEALTH CARE

1. Air containing pathogens and other material (red arrow marked **A**) flows toward collection hood **B** (by others).
2. The collection hood directs the air into the intake duct (by others). The last few feet of the duct nearest the unit are to be flexible, as shown at **C**, to facilitate unit movement and connection.
3. From the duct, air enters the Multistack® Aura HEPA+UV unit, shown at **D**, where contaminants are removed.
4. Clean air is shown returning to the room by free release, as shown by green arrows marked **E**.

NOTE: For clarity, only one collection hood is shown. In practice, collection hoods could be provided for each source of infection.



5. To maintain a negative pressure in the room, filtered air can be delivered to a hallway or other space via a duct connected to the outlet of the unit, as shown at **E** (below).
6. Where the room includes a PPE donning/doffing area, the negative pressure in it can be maintained via a duct connected to the inlet of the unit, as shown at **F** (below).



RECEPTION AREAS

1. In free flow, the air flows into the top of the unit **A**, where it is sanitized.
2. The air is then returned to the room near floor level **E**.

Alternatively, the unit could be located in an adjacent space and the air could be ducted to and/or from the waiting room.



OFFICES

1. In free flow, the air flows shown by the red arrow **A** into the top of the unit, where it is sanitized.
2. The air is then returned to the room near floor level, as shown by the green arrows **E**.

Alternatively, the unit could be located in an adjacent space and the air could be ducted to and/or from the office.



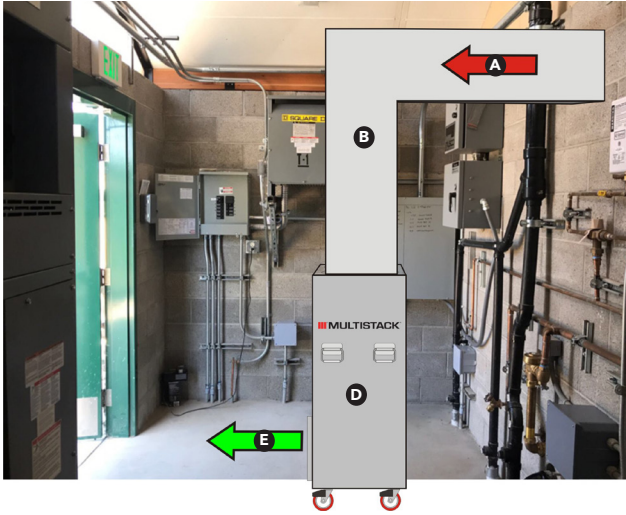
MEETING ROOMS

1. Air (red arrows marked **A**) flows from above the table into the tray-ceiling recess, acting as a collecting hood.
2. Ducts (not shown) carry the air to a unit in a small adjoining space like a closet, where it is sanitized.
3. The air can then be returned to the room.



RESTAURANT/CAFETERIA LARGE-TABLE APPLICATION

1. Air (red arrow marked **A**) flows toward the intake grilles (by others).
2. The grilles direct the air into the intake duct **B** (by others). The last few feet of the duct nearest the unit are to be flexible to facilitate unit movement and connection.
3. From the duct, air enters the Multistack® Aura HEPA+UV unit, shown at **D**, where contaminants are removed.
4. Clean air is shown being delivered to the adjacent mechanical room, as shown by the green arrow **E**. Alternatively, the clean air could be returned to the dining room.



RESTAURANT/CAFETERIA SMALL-TABLE APPLICATIONS

1. Air moves toward the collection hoods **A** (by others).
2. The grille directs the air into the intake ducts **B** (by others) and into a different space adjacent. The last few feet of the ducts nearest the unit are to be flexible to facilitate unit movement and connection.
3. From the duct, air enters the Multistack® Aura HEPA+UV unit, shown at **C**, where contaminants are removed by the unit **D**.
4. Clean air can be delivered to the mechanical room. The clean air could also be returned to the dining room. Alternatively, the unit could operate in free flow (with no ducts) when located in the room.



ASSISTED LIVING, COMMON AREAS

1. Air (red arrows **A**) flows from above the chairs into the return grilles.
2. Ducts (not shown) carry the air to a unit in an adjoining space, where it is sanitized.

3. The air can then be returned to the room.

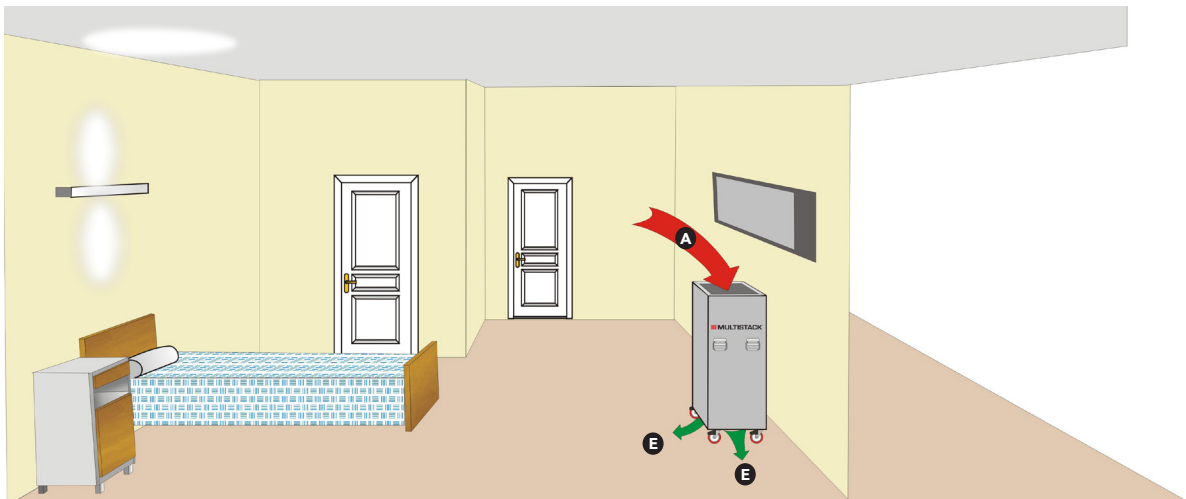
Alternatively, the unit could operate in free flow (with no ducts) when positioned in the room. Here, an example might be to the right of the couch.



ASSISTED LIVING, INDIVIDUAL ROOMS

1. In free flow, the air (red arrow **A**) flows into the top of the unit, where it is sanitized.
2. The air is then returned to the room near floor level, as shown by the green arrows **E**.

Where adjacent spaces are available, the unit could be located there, and the air could be ducted to and from the room.



AURA HEPA + UV

High capacity and high efficiency airborne infection air filtration units.

Portable all aluminum stand alone or ducted, 120/1/60 plug in power connection.

Variable speed control of up to 1800 CFM of air handling for high air change recirculation or negative pressure isolation rooms.

OPTIONAL CONNECTIONS



Inlet Option **INXXX**, no duct connection



Inlet Option **IN24S**, 24" X 24" square duct



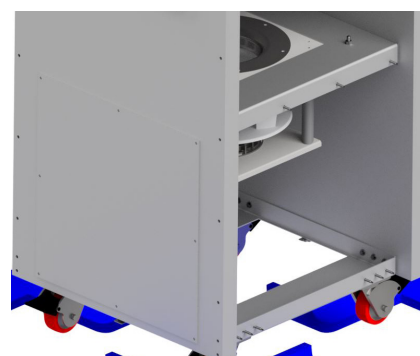
Inlet Option **IN18R**, 18" round duct



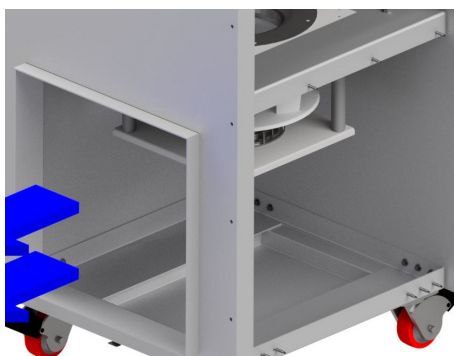
Inlet Option **IN18R**, four 8" round ducts



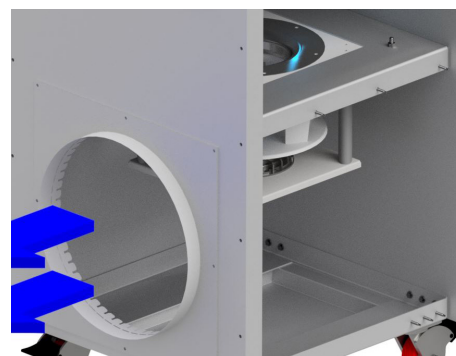
Inlet Option **IN84R**, six 6" round ducts



Outlet Option **OUTXXX**, no duct connection



Outlet Style **OUT20S**, 20" X 20" square duct



Outlet Style **OUT18R**, 18" round duct

