



SAPPHIRE
CLEANROOMS

AIR SHOWERS





AIR SHOWERS

Each unit is a fully equipped and protected passageway that allows large numbers of personnel to pass into controlled areas without sacrificing convenience or cleanliness.

Showers and tunnels supply concentrated Class 100 clean air flows that lift off contamination while an individual stands in or walks through a custom constructed air chamber. Whenever an automatic floor switch inside the unit is activated, pressurized air streams from adjustable nozzles at a velocity between 6,000 and 7,000 feet per minute, 30 m/s and 41 m/s, creating a force that ensures the efficient scrubbing action necessary to remove particulate matter. Air showers in units without floors are activated by motion sensors. Air showers are arranged on walls and ceilings in a uniform pattern to maintain effective distribution of filtered air. The lowest nozzle is positioned 18" (483 mm) off the floor. The closed-loop circulation design directs contaminated air downward through grills and hollow walls of the Air Shower and back again to the filter. This process removes 99.97% of all particles as small as 0.3 microns.

Interlocking doors prevent unnecessary contamination inflow while preventing cross-contamination of the cleanroom and the Air Shower or Tunnel. They automatically release in the event of a power failure to allow for operator safety. LED lighting, built into the ceiling to allow unimpeded air circulation, allows for full visibility no matter what size or configuration you select. In addition, an emergency stop button on each Air Shower/Tunnel sounds an alarm and releases the door lock for exiting.

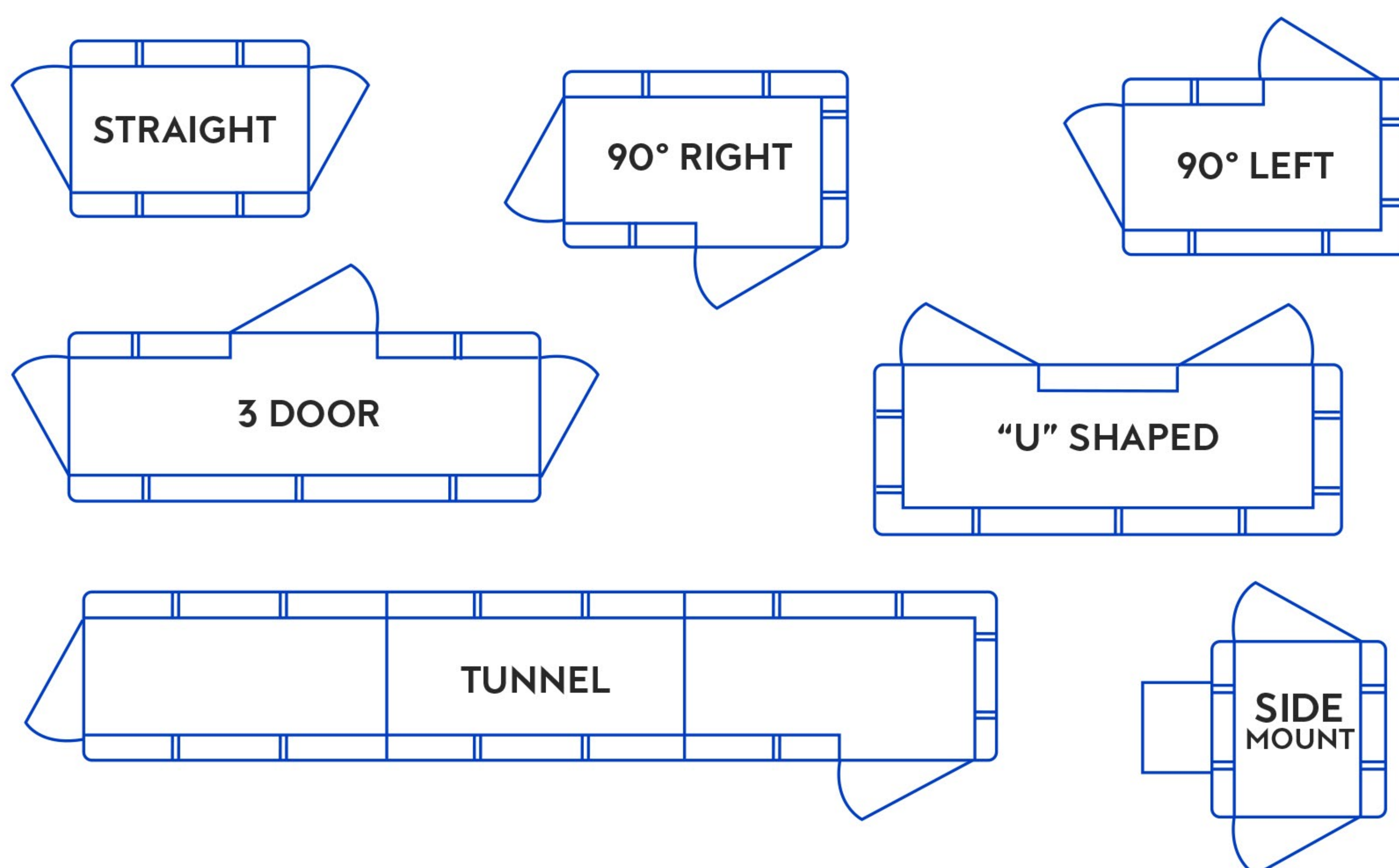
Motor/blower compartment has hinged access panels:

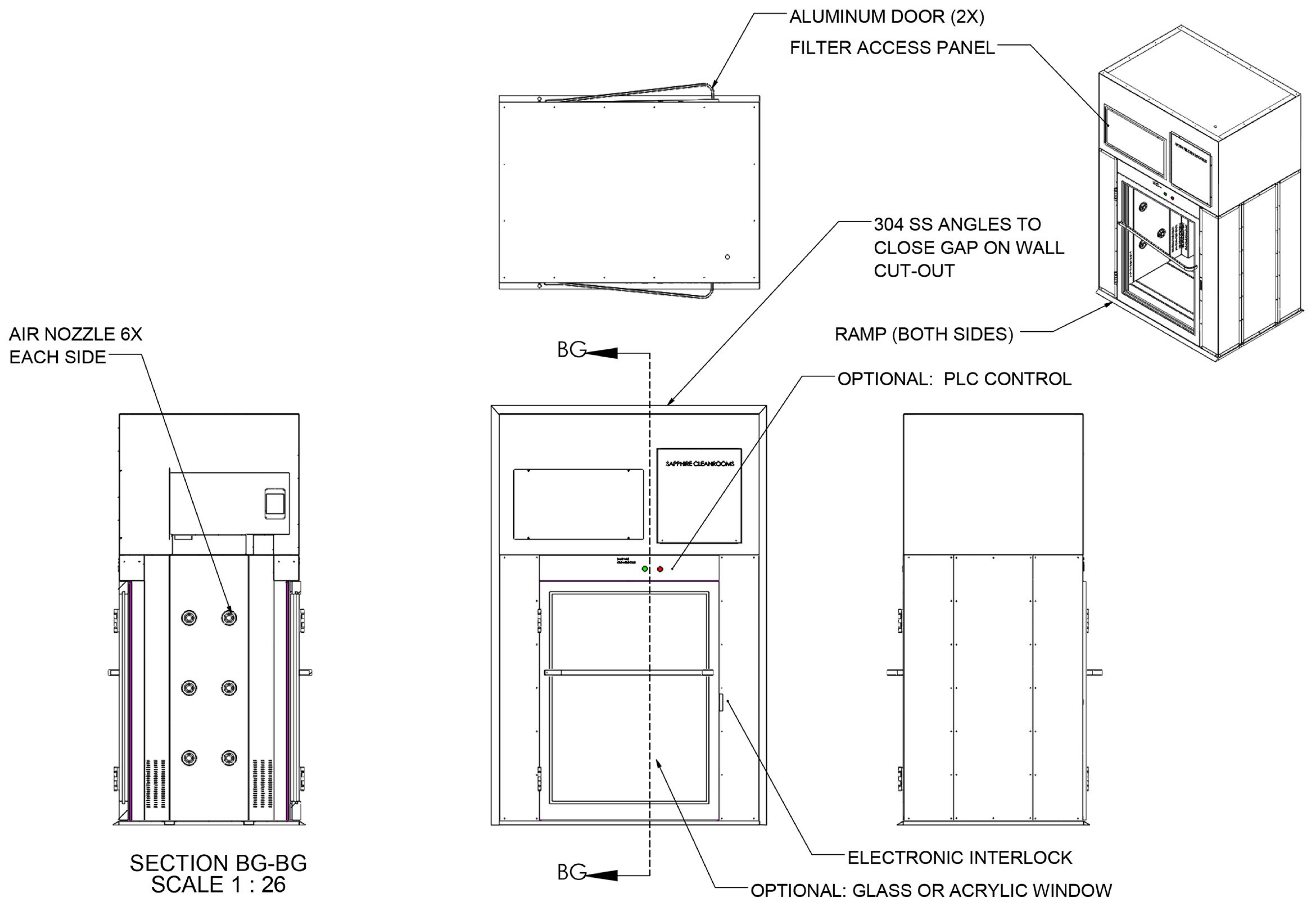
- Return air plenums are painted.
- Door interlocks operate on magnetic system.
- HEPA filter mounted on exit side of shower in top section.
- 360 degree adjustable air nozzles.
- Anodized aluminum doors with clear acrylic windows.
- 0-999 second adjustable operation pre-set to 30 seconds.

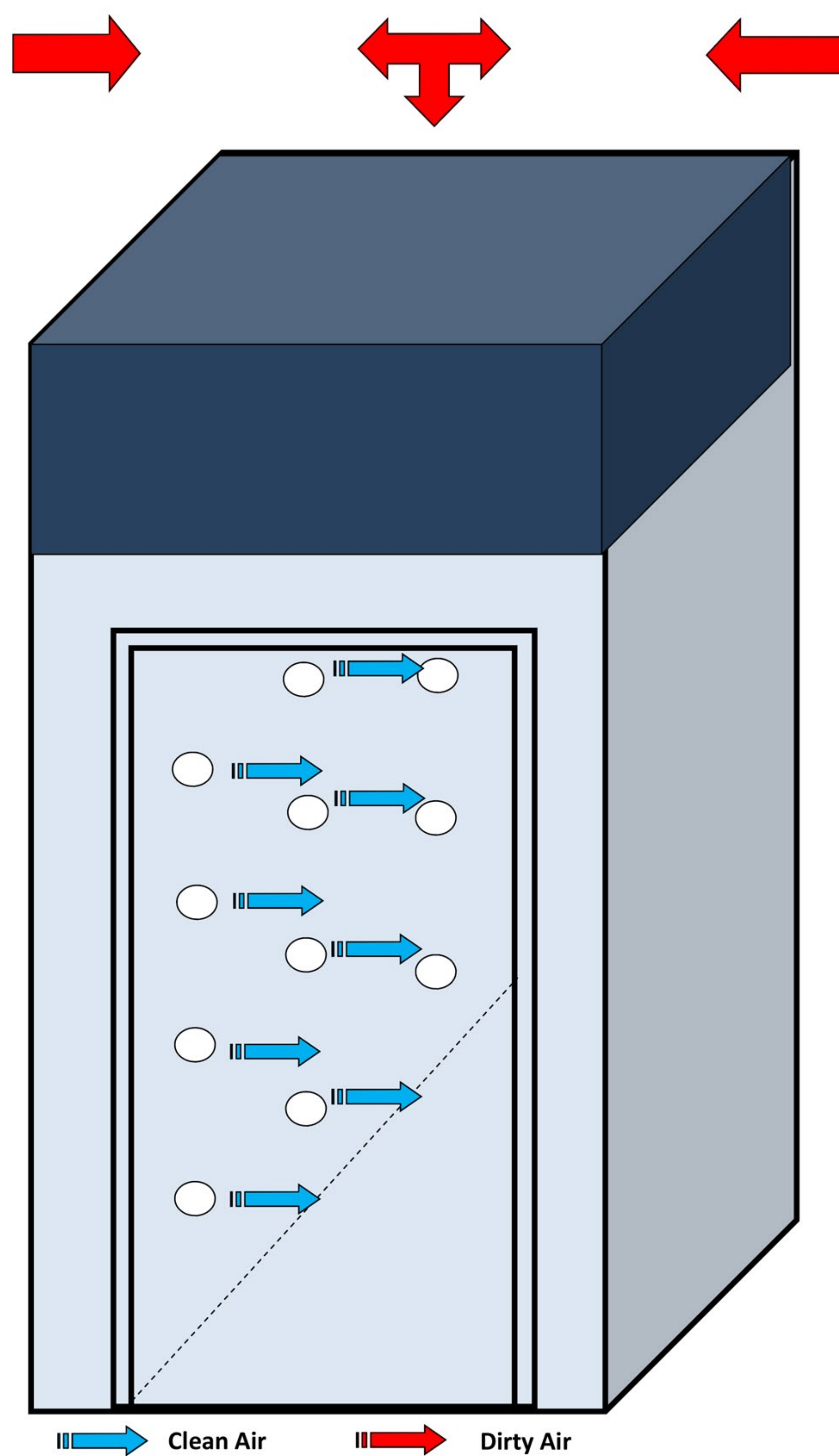
Electrical & Power Requirements:

- Electrical Components 230V or 460V, 3 Ph.
- Junction box on top for customer power supply.
- Control circuitry 12V DC & 24V AC
- Motors/Blowers are selected to maintain constant required airflow rate up to twice the initial static pressure.
- Filter/Blower housing has simple plug-in connector.
- Lighting - LED lighting.

Control Panel to control Air Shower adjustable timing and interlock sequence.





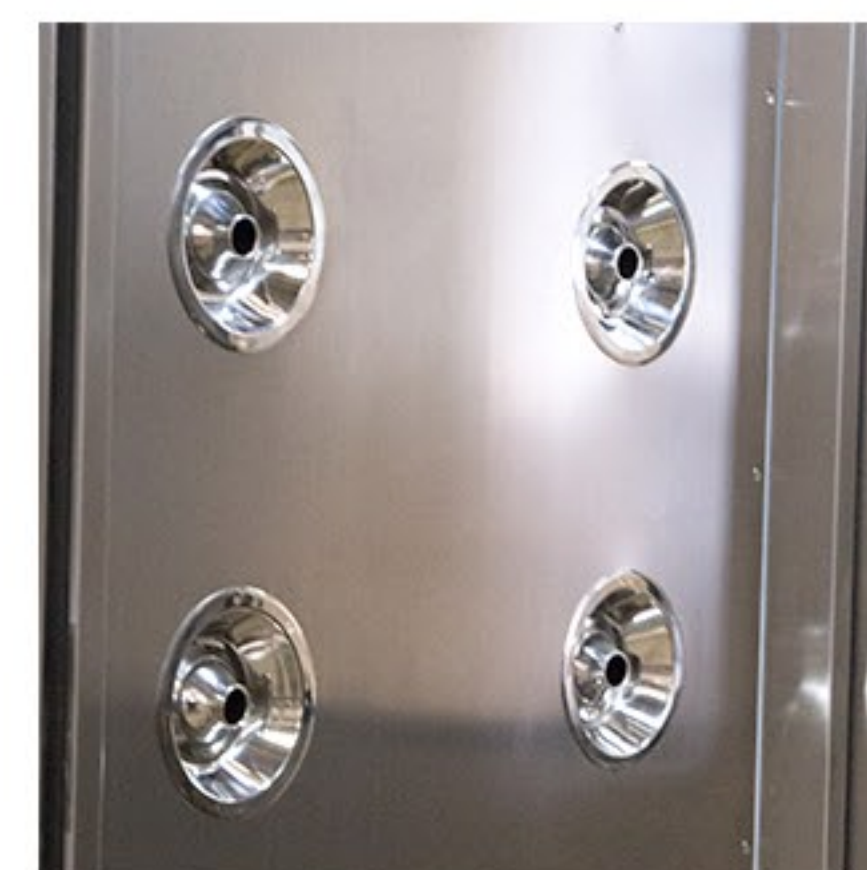


Standard:



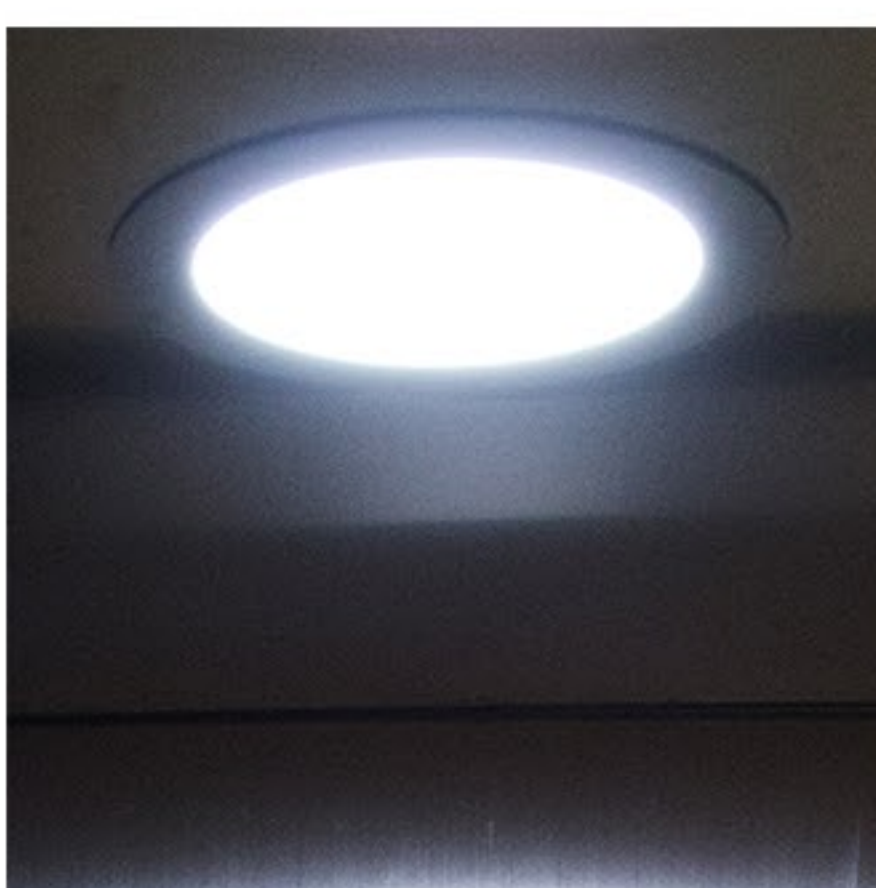
Recirculation Vents

Integrated wall vents and plenums recirculate HEPA (standard) or ULPA filtered air.



Adjustable Nozzles

Air showers feature adjustable nozzles to provide high velocity, multi-directional air for thorough decontamination of persons or parts



LED Lighting

Our LED lighting is controlled via independent switch, dimmable feature option available, 4000k, 5-year warranty.



Emergency Exit Button

Emergency Exit Button immediately stops air shower operation; doors automatically release in the event of power outage.



Interlock Door

Electromagnetic interlocking doors are a standard safety feature .



Control Panel

Easy to read, and operate, control panels allow users to adjust all functions of air shower.

Optional:



Wave Sensor Activation

Wave sensor options available for hands-free doors operation.





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