

Clean Cube

An inexpensive way to produce a permanent cleanroom

Modular construction. ISO 5/ Class 100. Vertical down flow.

The Clean Cube's self supporting structure significantly reduces both on-site engineering and assembly time when compared with a traditional cleanroom.



Clean Cube is a fully modular system
Units can be made to your specifications



Born out of the need for something more permanent than the Clean Tent, the Clean Cube is a self supporting structure in a modular design form which significantly reduces on-site engineering and assembly time. The Clean Cube doesn't usually need any planning permissions so estate department interventions are minimised.

Construction

A modular 1200mm wall frame system constructed from box section anodised aluminium, locks together to form the perimeter of the room. The walls are in-filled with glass panels to make the most of ambient light.

A structural T-grid ceiling provides the location for recessed lights, air conditioning and fan/filter units. The maximum column free span is 6 meters.

Air system

The Moorfield fan filter units (FFU) all contain a HEPA ISO 5 compliant filter and pre filter. The FFU is controlled by a variable speed rotary dial and on/off switch. The fan can provide up to 1100 m³/hr through the filter at the industry standard 0.45 m/sec face velocity. This ensures that the air change rate at the work station is high for the specified Class specification. The air system works on vertical laminar flow principles, exhausting through adjustable vents set low in the wall panels.

Achievable class levels

Class 100,000. ISO 8

Class 10,000. ISO 7

Class 1,000. ISO 6

Class 100. ISO 5

Note:

Cannot achieve above ISO 8 class 100,000 without a gowning room. Cannot achieve above class ISO 7 10,000 with a soft entrance (strip curtain).

Options

Although we offer a standard size the vast majority of the Clean Cubes sold are to custom sizes. Other options include:

- Gowning rooms
- Solid doors
- Soft entrances (strip curtain)
- Pass-through hatches and personnel / equipment loading doors
- Air conditioning and recycle air ducting added as required as per a normal cleanroom.



Electrical

Fan 280W, 230vac 50Hz standard.
Supply 5A, 230vac 50Hz single phase 3 pin plug



Fan filter unit

Lifespan Full speed 20,000 hrs continuous



HEPA H14

Vmax at face 0.45 m/sec.
Lifespan Approximately 5 years in lab conditions with continuous fan



Pre-filter

EU8 polyester pre filter 400mm x 400mm.
Lifespan Approximately 4 weeks in lab conditions with continuous fan.