

TECHNICAL SPEC

1. CEILING SUSPENDED VERTICAL LAMINAR AIR FLOW UNIT

Ceiling Suspended Vertical Flow Laminar Air Work Station designed to supply Class ISO 5 (Class 100) air for Product Protection.

CONSTRUCTION: SS 304 (1.2 MM)

HEART OF SYSTEM COMPRISES OF

- **Imported Minipleat HEPA Filter with hot melt technology**, which conforms to **H 14 Grade**, with an efficiency rating better than **99.999% for 0.3 μ at supply position**.
- **Fabtech make Fresh Air Prefilter** which conforms to **EU 7 Grade**, with efficiency of **99% down to 3 micron**. These Filters are basically made from micro-HDPM-glass media and are inherently washable.
- **Motor Blower** provided are statically and dynamically balanced, Supply of sufficient capacity and static pressure is used to take care of airflow requirement for entire life of HEPA. Blower is high performance, noise abated, light weighted statically and dynamically balanced.
- **Magnehelic Differential Pressure Gauge** (0 - 25 mm: 1 No.) to monitor pressure drop across main HEPA Filter with respect to ambient
- **Led Light**
- **PAO Test port** at upstream of HEPA filter
- **Atmosphere Nozzle**

PERFORMANCE

Air cleanliness - ISO Class 5 (ISO 14644-1:1999(E))

Air Velocity - 0.45 ± 0.05 mps

Air Flow - Vertical

Noise Level - Less than 72 dB on Scale 'A' when Ambient is not greater than 57 dB on Scale 'A'

Vibration Level - Minimum

POWER SUPPLY: 230 V AC 1-Ø 50HZ

TEST WHICH WILL BE CARRIED OUT AT SITE

- HEPA Filter Integrity Test
- Particle Count Test
- Air Velocity Measurement Test

DOCUMENTATION

- Operation & Maintenance Manual
- Design Qualification
- Installation Qualification
- As Built Drawing & Electrical Wiring Drawing

CERTIFICATES

- HEPA Filter Test Certificate
- Air filter Test Certificate
- Motor – Blower Test Certificate
- Material of Construction Certificate for SS 304
- Calibration Certificate for Magnehelic Gauge

SITE REQUIRMENTS

1. As the laminarity of the airflow can be achieved up to 760mm height from HEPA filter face, the unit may have to be provided with Polycarbonate panels or flexible overlapping curtains on all four sided to direct airflow to work area.
2. The unit will be provided, with 2ft. length suspension members as a standard part of supply. Any additional suspension members can be provided at any extra coast based on main ceiling height either in MS or SS as required by Client.
3. Client to provide layout drawings (with respect to unit location) with dimensional details to enable us to work out exact dimensions of the Laminar Flow Unit. Also following details will be required to enable us to calculate length of ceiling suspension members & Polycarbonate side panels:
 - Floor to Main Ceiling height
 - Floor to False Ceiling height
 - Floor to work table height
4. Client to confirm the preferred location of the Control Panel and ON/OFF switch.
 - In case of wall mounted or remotely located control panel, provision of any electrical cabling required from unit to control panel & control panel to be ON/OFF switch will be in Client scope.
 - Client to confirm the location of supply pedant to enable us to decide on the entry of main cable in the unit to avoid any loose from projecting out.
 - Concealing of electrical cabling (if so required) is in Client's scope
5. Client to provide facility of 20 psig compressed air / nitrogen cylinder any compressed gas not harmful to personnel for carrying out the HEPA Filter Integrity Test.