

## Laminar Air Flow (Vertical type Air Flow Bench)

TOPLAB INDIA'S Laminar Air Flow / Clean Bench are necessary basic equipment for biologic technical researches and experiments. It is widely applicable in the field of pharmaceuticals, biochemistry, environmental monitoring and electronic instruments for purifying air in the operation area.



Laminar Air Flow Cabinets by TOPLAB INDIA are a series of high efficiency clean room work benches designed to protect equipment and other contents of the work zone from particulates. These LAF cabinets are available in 5 standard sizes that can be further customized to meet unique requirements of our customers. These cabinets are well suited for cell culture and microbiological applications that require class 100 air quality.

### Vertical Vs Horizontal Laminar Flow

In a horizontal air flow cabinet, filtered air blows across the work zone in horizontal direction; this constant flow of air provides material and product protection. Whereas, in a vertical laminar air flow cabinet, filtered air blows on the work zone and leaves through the holes in the base. As compared to horizontal type, vertical flow cabinet can provide greater operator protection. Furthermore, it is user preference that decides which type of laminar air flow cabinet should use.

### Product Characteristics:

- The shell is made of quality cold-rolling Mild steel (MS) /SS with static spray plastics.
- The operation table is made of SS304 (optional SS316) which is corrosion-resistant and easy to clean.
- Centrifugal fan which has steady rotate speed and low noise.
- LCD control system (optional), touch type switch, six steps of wind speed control.
- Be equipped with UV light and lamp control, timer range of sterilization is 0-999min.
- Open-type front window can prevent the air outside from permeating and keep the operation area clean.
- Both sides are organic Acrylic glass which is transparent and durable.
- Be equipped with HEPA, the pre-filter is set as the medium efficiency filter system to extend HEPA's life.

## Vertical Laminar Air Flow Bench

**Technical Parameters:**

Model	TL-4LAF-V		
Airflow Direction	Vertical Airflow		
Working Side	One side		
Cleanliness Class	Class 100		
HEPA Filter	99.999% @ efficiency for particles $\geq 0.3\mu\text{m}$		
Pre-Filter	85 % efficiency for particles $> 0.5 \mu\text{m}$ (Washable)		
Particle Count	Better than US Fed Std 209B Class10 and VDI 2083 Class 3		
Cabinet	Laminated High Quality PCRC/MS Sheet Powder Coated/Stainless Steel SS 304 (optional 316 grade)		
Work Table	SS 304 Stainless Steel (optional SS 316 grade)		
Wind Speed	0.3-0.6m/s (Adjustable)		
Airflow Speed	Control Speed Controller (Three Step Speed Controller)		
Blower	High efficient centrifugal type with lifetime lubricated bearings		
Noise	$\leq 62\text{dB}$		
Vibration Half Peak Value	$\leq 3\mu\text{m}$ (X, Y, Z direction)		
Lamp	Fluorescence / LED		
Illuminance	$\geq 800\text{LX}$		
Working Zone ("Ft")			4' x 2' x 2'
			150 kg
Power Supply	AC220 $\pm$ 10V, 50/60Hz		
	<ul style="list-style-type: none"> <li>o Microprocessor LCD Controller</li> <li>o Digital display for Air Flow Rate</li> <li>o Transparent Front Door</li> <li>o Gauges Pressure (Statics Pressure Mano-Mater)</li> <li>o Magnahelic Gauge (for filter pressure)</li> <li>o U. V. Germicidal Tube in work area</li> <li>o Electronic Filter choke alarm</li> <li>o Spare HEPA Filters</li> <li>o Auto switch on/off for U.V. Germicidal tube &amp; fluorescent light</li> <li>o Hour Meter for UV light</li> </ul>		



Stainless Steel Casters



Telescoping Base Stand



Magnehelic Gauge



Thermal Anemometer



Service Fixtures