



## Product Overview

The Biological Safety Cabinet Class II / Type A2 is designed to provide **personnel, product, and environmental protection** while working with biological agents. These cabinets are widely used in **universities, research laboratories, pharmacies, and pharmaceutical companies** to ensure safe handling of biohazardous materials. The system effectively protects the operator from cross-contamination of samples while providing primary containment of biological hazards.

The cabinet operates with a **minimum airflow velocity of 90 fpm  $\pm$  20 fpm (0.51 m/s)** through the face opening, ensuring optimal airflow balance and contamination control.

## Applications

- Universities and academic research laboratories
- Biological and biomedical research facilities
- Pharmacies and pharmaceutical manufacturing units
- Microbiology, virology, and biotechnology laboratories

## Key Features

- **Class II / Type A2 design** providing full **personnel, product, and environmental protection**
- Primary containment of biohazardous materials used inside the cabinet
- Protection against cross-contamination of samples
- Operates with minimum airflow velocity of **90 fpm  $\pm$  20 fpm (0.51 m/s)** through face opening

*Note: Specifications are subject to change, Photos shown above are Indicative, Actual Product can Vary.*



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- **Air circulation system:**
  - 30% exhaust air
  - 70% recirculated air
- **Outer body and inner working chamber constructed from SS 304 grade stainless steel**
- **Main filtration system:**
  - HEPA filters with **99.997% efficiency at 0.3 micron**, fully compliant with **EN 1822**
  - HEPA-filtered working platform ensuring clean working conditions
  - Filter choke alarm for safe and continuous operation

### Safety & Protection

- **Personnel Protection:** Shields operators from exposure to potentially harmful biological agents
- **Product Protection:** Prevents contamination of research samples from room air or cross-contamination within the cabinet
- **Environmental Protection:** Prevents release of contaminants generated inside the cabinet into the surrounding environment

### Digital Monitoring & Control System

- **Full digital microprocessor-based monitoring system**
- **Back-lit LCD digital display** indicating:
  - Real-time downflow and inflow air velocity
  - Filter integrity monitoring
- User-friendly membrane keys for easy operation
- **Audio-visual alarms** for airflow imbalance, filter choke, and system faults

### Airflow Performance

- Inflow airflow: **240 CFM**
- Downflow airflow: **400 CFM**
- Exhaust airflow: **700 CFM**

### Construction & Ergonomics

- **Working table:**
  - Removable stainless steel 304 grade work surface
  - Thickness: **1.5 mm (16 gauge)**
- **Internal fluorescent lighting fixture** designed to:
  - Not face the user directly

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- Remain outside the airflow stream
- **UV light fixture** with UV tube and **ON/OFF timer**
- Smooth interior surfaces for easy cleaning and maintenance

**Utilities & Accessories**

- Provision for **15A / 5A combination electrical socket** inside the cabinet (can be extended as per requirement up to 5 socket )
- Provision to monitor filter integrity via **pressure differential gauge**
- Cabinet supplied with **support floor stand fitted with caster wheels** for easy mobility

**Technical Specifications**

Parameter	Specification
Cabinet Class	Class II / Type A2
Airflow Velocity (Face Opening)	90 fpm ±20 fpm (0.51 m/s)
Air Circulation	70% recirculation, 30% exhaust
Inflow Air Volume	240 CFM
Downflow Air Volume	400 CFM
Exhaust Air Volume	700 CFM
Filtration Efficiency	99.997% @ 0.3 micron
Filter Standard	EN 1822 compliant HEPA
Body Construction	SS 304 grade (outer & inner chamber)
Work Surface	SS 304, 1.5 mm / 16 gauge, removable
Lighting	Internal fluorescent lamp (out of airflow)
UV Light	UV tube 15W with ON/OFF timer
Electrical Socket	15A / 5A combination socket
Monitoring System	Digital microprocessor based
Display	Back-lit LCD digital display
Alarms	Audio-visual alarms with filter choke alert
Filter Integrity Monitoring	Pressure differential gauge
Inside Working Size	3 ft × 2 ft × 2 ft (900mmx600mmx600mm) Aprox
Mounting	Floor stand with caster wheels

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