

## **Lab Fume Hood with Base Cabinet PP (Polypropylene)**

Fume hoods are equipment's that are used to ensure safety for the user as they won't be exposed to many hazardous and dangerous fumes. **Fume hood** capture the fumes/effluents released during any given experiment, contain them in the enclosure and then emit through their well -designed exhaust system. We specialize in **standard** and **customized fume hood**. Fume hoods typically protect only the user, and are most commonly used in laboratories where hazardous or noxious chemicals are released during testing, research, development or teaching. They are also used in industrial applications or other activities where hazardous or anxious vapors, gases or dusts are generated or released.

### **Applications**

- ® Chemical Laboratories
- ® Testing and Research

### **FUME HOOD FEATURES**

1. Material of Construction (MOC) PP (Polypropylene).
2. Low noise levels energy efficient mechanism
3. ISO & CE marked
4. Fume Hood Floor standing
5. Semi close ventilated exposures.
6. Provided with sliding sash made out of special grade shatter proof glass duly PP/Aluminum Polypropylene frame with sliding motion and counter weight balanced mechanism.
7. Illumination level of approx. 800 Lux on the work table.
8. Heavy duty exhaust system, comprising of dynamically balanced centrifugal impeller with high-speed motor
9. Suitable ducting of required dimension as per the individual requirements
10. Feather Touch based controls
11. Electrical Outlets: Direct mounted single electrical outlet. (Available in all international sockets out let types. Specify when ordering.)
12. **Aesthetically Designed**-Designed according to the standards and principles underlining industry's aesthetic values.
13. **Energy Efficient** -Fume hoods uses less energy to provide the same level of performance, comfort and convenience, thus making it energy conserving.
14. **Sturdy Construction** -fume hoods are built with robustness to with stand stress and strain, giving it long life and ability to perform in extreme stress environments.

### **Operating Principle**

Fume-hoods draw air out of the rooms they are installed in. The fan sucks in the air toward the duct and exhaust outside

## **FUME HOOD TESTING PROCEDURES OF CONTAINMENT**

Fume hoods are specifically to decrease the loss of static pressure at a given baffle opening position. According to the standard procedures the average loss of static pressure at any given four points at ninety degree and 3 duct diagram the fume hood, that will not exceed 75feet per minute at 0.25 inch, with full slash opening and face velocity of 100 feet per minute.

## **FUME HOOD CONSTRUCTION DETAILS**

Fume hood is made up of polypropylene PP. The granite work bench is provided with all modular fume hoods are provided with sliding sash made of special grade shutter proof glass duly Polypropylene with sliding motion and counter weight balanced mechanism.

## **FUME HOOD NOISE AND SOUND LEVELS**

Our PP fume hoods are designed with lower noise levels and the performance of these fume hoods are comparatively better than the industry standards of 65dbA, and approximately 15cm distance from the sash.

## **FUME HOOD ILLUMINATION LEVELS AT WORK SPACE**

Our fume hoods make sure that a maximum of 800 lux light is available on the work table through diffuser fluorescent light arrangement.

## **FUME HOOD EXHAUST ASSEMBLY**

These fume hoods are incorporated with an extremely durable and strong exhaust system that generally persists range of 500-1250 CM. These exhaust assembly comprises of balanced centrifugal pellets that are combined with a heavy duty three phase motor of Crompton greaves.

## **FUME HOOD EXHAUST DUCTING**

These fume hoods can also integrate with a PVC ducting of required dimension as per the requirements of the user.

## **FUME HOOD AIR VELOCITY**

Our fume hood ensures that the optimum face velocity of 80 feet - 100feet per minute is maintained with an accuracy of + 10 feet/minute with the sash in complete open position.

## **FUME HOOD VOLUME OF EXHAUST:**

Our fume hoods are capable of maintaining a constant exhaust volume. The maximum variation permissible due to baffle adjustment, in our in-house test procedure is 6% of the given volume of exhaust.

**Others: -**

## **FUME HOOD BLOWER: -**

- 1 Hp Motor with centrifugal Blower

## **ONLY PP FUME HOOD TEMPERATURE SENSIBILITY: -**

- PP Temperature Sensibility is 175°C to 200°C

## **FUME HOOD WORK TOP:**

- Easy to clean made of Black Granite 16-17 mm Approx.

## **FUME HOOD SASH (SHUTTER):**

- The unit is fitted with vertical counter weight balanced sliding door movement made up of PP frame fitted with 5 mm laminated safety glass.

#### **FUME HOOD ELECTRICAL ARRANGEMENTS**

- 2 nos. of switches and sockets (Two on each side);
- 1 No. blower switch at facing panel;
- 1 No. Illumination Switch at facing panel;

#### **UTILITY/ SERVICE FITTINGS**

- Panel mounted valve for Gas with nozzle – 1nos
- Panel mounted remote valve for Sink and Water with nozzle – 1nos

#### **FUMEHOOD ILLUMINATION:**

- Fluorescent FL light

#### **FUME HOOD FACE VELOCITY:**

- 80 - 120 FPM (Average at 12" Sash opening Fume Hood) as per ANSI

#### **FUME HOOD AIR VOLUME:**

- 800-1000 CFM (Designed for Full door opening) as per ANSI

#### **FUME HOOD**

##### **POWER SUPPLY:**

- 220-240V AC 1-Ø50HZ

#### **FUME HOOD Ducting:**

- Ducting by PVC ducting of minimum 6" diameter

**Specifications of PP(Polypropylene) - Fuming Hood**

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S.No.	General Features	Specifications
	Property of fume hood	
1	Type of fume hood	Fume Hood with Base Cabinet
2	Temperature Sustainability only PP	175°C to 200°C
3	Exhaust Duct	PVC Pipe with T and Flange.
4	Exterior body	Polypropylene PP
5	Thickness of sheet	min. 12/15/18 mm Only PP
6	Working Top (interior walls)	Granite top 16-17 mm Approx.
7	Fume Hood dimensions (WxDxH) mm	

a)	Working Area (Internal)	4x2x2 ft
8	Face Velocity	80-120 FPM (Average at 12" Sash opening Fume Hood) as per ANSI
9	Air Volume	800-1000 CFM (Designed for full door opening) static pressure 2"W.G.
10	Air Flow Type	100% Exhaust
11	Switch for exhaust fan	Yes
12	Noise Level	<65db at 1 meter from fume hood
13	Power Supply	230V $\pm$ 10V, AC 1-50 HZ
<b>Technical Features</b>		
1	Cabinet Construction	
a)	Only PP Exterior wall	Total screw less and metal free fully Polypropylene PP
b)	Only PP Interior wall	Inner made of Polypropylene PP Sheet
2	Corners and Edges	All corners and edges of the fume hood must be leak-proof
3	Hood Work Top	Made of Granite 16-17mm
4	Sash (Shutter)	Opening Height 21 Inches, PP Opaque
5	Auxiliary socket	Completely Two Explosion Proof Sockets Non-Reactive
6	Cable (Wire)	Fire Retardant Cable
<b>Motor and Blower Assembly</b>		
1	Exhaust motor / Blower assembly powered by	1 HP 1440 RPM TEFC (Single / Three phases)
2	Motor housing and the impeller	Fully Polypropylene PP
3	Blower Type	Centrifugal Blower
4	Housing of blower	made of polypropylene
5	Coupling	Exhaust motor directly coupled to radial type impeller
6	Exhaust Duct	PVC Pipe ducting of minimum 6" diameter
7	Electrical sockets	15 A each
8	Switches	light and blower switches with necessary MCB
9	Illumination	At least 1 No. at facing panel
10	Cables and wires	Fire retardant grade with provision of cable entering port
11	Earthing	Yes
13	Motor Brand	Havells /Godrej or Equilent
<b>Base Cabinet</b>		

		-	Base storage cabinet three vertical and two horizontal portions
			Modules made of polypropylene (PP) Cupboards will be provided with branded handles & closures.



**Image for reference only**