

CHEMICAL FUME HOOD



KEY FEATURES

Construction

- Chemical-resistant interior lining (Mild Steel stainless steel, or Polypropylene)
- Durable, easy to clean, and resistant to corrosion.
- Internal Lining of Fire Retardant Material (FRP / PRL) Fibre resin Polymer / Phenolic Resin Lamination .

Work Area

- Spacious, flat surface for experiments having Skirting Granite on base 19mm
- SS Sink and taps are provided for washing and discards
- Baffle Arrangement for ensuring effective capture of vapours, even heavy gases (low level) or light gases (upper level)

Adjustable Sash Window

- Vertical or horizontal sliding glass sash for user protection and access.
- Acts as a protective barrier between the user and chemical
- Protects the user from harmful chemical fumes, vapours, and gases

Airflow System

- Constant airflow (typically 80–120 feet per minute).
- Pulls air from the lab into the hood and exhausts it outside.

Lighting

- Bright fluorescent/LED lighting isolated from airflow for safety
- Glare-free and shadow-free illumination.

Motor Type Used in Chemical Fume Hoods

- Centrifugal Blower Motor with Direct Drive
- 0.5 HP – 2 HP (depending on hood size & airflow requirements)
- 220V single-phase or 415V three-phase (Indian standard)
- 1400–2800 RPM
- Non-sparking, corrosion-resistant PP Blower

Safety Features

- Airflow monitors & alarms for low airflow.
- Sash height markers for safe working levels.

Utility Ports

- Gas, water, vacuum, and electrical outlets is built in.

Storage Cupboard

- For lab consumables and non-hazardous materials.
- Lockable hinged or sliding doors.
- Vents connected to exhaust system.
- Non-metallic hinges and fittings to resist corrosion.

MAJOR APPLICATIONS WITH USAGE

Location / Industry

Research & Academic Labs

Pharmaceuticals Industry

Chemical Industry

Biotechnology & Life Sciences Hospitals & Clinical Labs

Food & Beverage Testing Labs

Forensic Laboratories

Specialized Applications

Purpose / Use

Safe handling of chemicals, teaching, and experiments involving volatile reagents R&D.

Formulation, quality control, handling solvents

Corrosives Synthesis, testing, and pilot plant operations with hazardous chemicals.

Working with solvents, fixatives, and hazardous reagents.

Handling toxic reagents (e.g., formalin, xylene), preparing samples

Chemical analysis using acids, solvent, and alkalis Sample digestion.

Analysis with strong acids/solvents Toxicology, narcotics testing, chemical evidence handling perchloric acid hoods, radioisotope hoods, explosion-proof hoods



TECHNICAL MATRIX

Model No	PTE FM 812A	PTE FM 812B	PTE FM 812C	PTE FM 812 D	PTE FM 812 E
WorkingTable Size	2' x 2'	3' x 2'	4' x 2'	5'x2'	6' x 2'
Inner Size (WxDxH)	2' x 2' x 3'	3' x 2' x 3'	4' x 2' x 3'	5'x2'x3'	6' x 2' x 3'
No. Of Motor/Blower	1	1	1	1	2
Illumination	1 x 20 w	1 x 30 w	1 x 40 w	1x40 w	2x 40 w
MOC	Mild steelDulypowderCoated /Stainless Steel / Polyproplene				
Type	Floor Model/ Table Top				
Motor Blower	Centrifugal motor Direct Drive Blower upto 0.5- 2 HP				
Working Table Top	Fittedwith acid/alkali resistant Black granite Stone and SS sink fitted with swan type water tap.				
Baffle arrangement	Two layer for exhaust heavy & mild fumes				
Suction capacity	Air suction capacity is 800+/-20 CFM				
Front Door	Vertical rising sash counter-balanced with pulley and counterweight system. Float Glass sash (4 mm thick). Smooth and light sash operation. Clear openable height = 700 mm				
Standard Accessory	Gas/Air cock fitted with 15/5 amp socket with switches				
Electric Supply	AC 230V , 50/60Hz				

OPTIONAL ADD ONS

- Airflow monitor / alarm (for low face velocity)
- Sash position sensor with alarm
- Scrubber
- Emergency power off (EPO) switch
- Horizontal or combination sash
- Motorized sash with auto-closing mechanism
- Acid/corrosive storage cabinet (polypropylene lined)
- Emergency eye-wash or safety shower
- FRP / PRL Inner Lining