



Laboratory Fume Cabinets

Operator Protection



AIRCURE

DESIGNING CLEAN AIR **FOR LIFE**

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Fume extraction cupboard with protection barrier, the cupboard must be designed to protect the operator and the immediate room from hazardous fumes. The system must ensure optimum airflow inward on the work surface, with the help of the front air barrier. The system must be designed to create a protective barrier and prevent exchange between the internal, potentially hazardous contaminated air, and the outside. The cabinet must be able to obtain an inward velocity in accordance with the ASHRAE 110-1995.

Exterior

- The exterior of the cabinet must be constructed from epoxy coated mild steel.
- Side panels must be removable for easy servicing on the gas or electrical panels.
- The cabinet must be manufactured so that it can fit through a standard door.

Interior

- The interior of the cabinet must be lined with 6mm acid resistant solid core Formica (White). No parts of the exterior exposed or in contact with substance being used inside the cabinet.
- The unit must have a false rear panel to assist in extraction of both heavy and light gases.
- All fasteners within the cabinet to be corrosive resistant.

Work surface

- The work surface must be a 12mm acid resistant solid core Formica fixed work top sealed.

Lighting

Double fluorescent tubes located outside the working area, on top of the cabinet.

Extraction Fan

Extraction fan to be of SEAT type series 35 and a weather protection stand with the correct handling and motor selection.

Add Air

Add air to be provided thru the front plenum to create a safe frontal air barrier. Add air plenum to be epoxy coated mild steel with a 200 Ø spigot on top

Dampers

Cabinet to have an adjustable extraction damper, situated on top of the cabinet.

- The work surface to be able to contain a spillage of at least 10 litre.

Glass Sash

- 6mm toughened glass sliding sash with counter weights and stainless steel glass sash handle that directs airflow inwards and does not create turbulence.
- The cabinet should be evenly balanced so that the viewing window acts as a damper to create more even velocity whether the sash is in an open or closed position.

Control Panel

- Control panel must be situated on the left hand side of the cabinet; panel must be removable for easy servicing.
- On/Off Isolator
- On/Off Light switch
- Red/Green Indicator for Not Safe/Safe operation
- 2 off Clipsal plug points
- Audible alarm for not safe operation

Service Panel

- Service panel to be situated on the right hand side of the cabinet, panel to be removable for easy servicing of water/gas valves.
- Service panel to have provision for 5 service valves.

Services

- Drip cup to be of Broen 500 large drip cup.
- Bottle trap to be of Broen ant siphon bottle trap.
- Water valve and spout to be of Broen and with braided hose and uniflex connection.
- Gas valves and spout to be of Broen and with braided hose and uniflex connection.
- LPG valve and spout to be of Broen and with certified rubber hose and uniflex connection.
- Outlet on water and gas valves to be 10mm nylon (8bar) flexible with uniflex connection.



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