

MAJOR[®]

SUPERFLOW

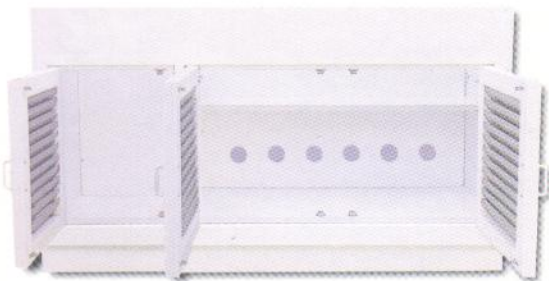
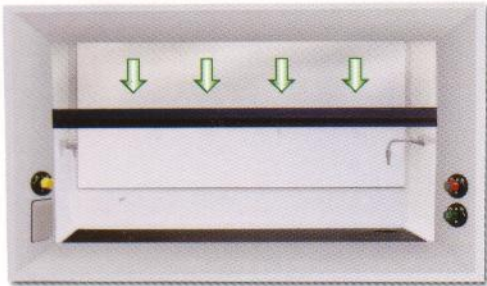
100 • 120 • 150 • 180 • 200



Standard Fume Cupboard

SUPER FLOW

FUME CUPBOARD



Fiberglass Type



Metal Type

Structure

The fume cupboards are manufactured from fiber glass reinforced unsaturated polyester resin (F.R.P.) fire retardant, corrosion resistant, with no metal contains in the structure. The frontage of fume cupboard is aerodynamically shaped to ensure an even flow of air in the chamber. It has large radius corners. The extraction rate from fume cupboard is depend on the position of sash. The storage part is designed to support the fume cupboard. The storage unit is manufactured from F.R.P. Completed with slated door, acrylic baffle (for Fix point automatic by pass 1:10 approximate and two seperate parts. The first part is designed for storage LPG tank and the other designed to be the adjustalbe shelf for chemical storage. The back of storage part can be removed for access to any service. The fume cupboard also available with Epoxy Coated Steel exterior upon request.

Chamber

The one piece moulded chamber has excellent aerodynamically shaped roof which is contoured towards a rectangular extraction outlet. The interior of chamber is fitted with aspecially designed back baffle. It is removalbe for cleaning purpose.

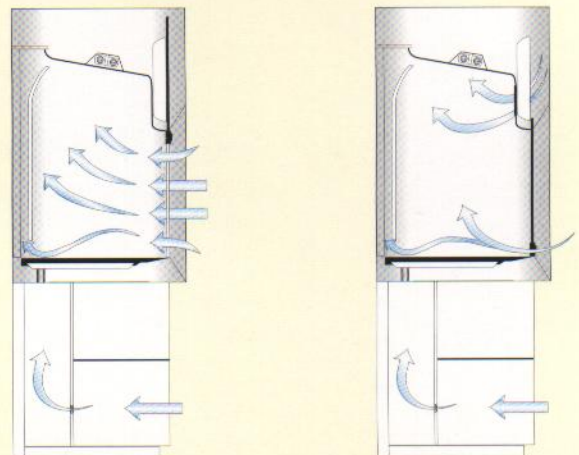
Floor

Two levels, Top for working area, Lower for drainage.

Sash

The counter-balanced sash windows are of the vertically sliding sash type supported on chemical resistant cable and running bearing pulleys which are bullet embedded in rigid nylon. Sash window is 6 mm. safety glass fixed in F.R.P. frame, polyurethane hankles.

Air Flow Diagram



Sash fully raised. All extraction through sash opening. By-Pass closed.

Sash lowered. Velocity was controlled through sash opening and by-pass. By-pass open.

Acid Trapping System

The acid trapping system is designed principle to handle acid fumes in pipe line. The interior of system has transfer 2 holes for air turbulent protection. The air movement control is reverse air transparent type.

Pipeline System

The pipe line are manufactured from F.R.P. smooth exterior. The pipe lines are connected by fiber glass resin for protection from the distribution of fume. Pipelines have 135° elbow at the end of pipe line for bird and rain protection.

Workbeds

The specially designed removable workbed is very useful. It gives amaximum available working surface and easily to clean-up or even changing in the future. The work-top can be removed to reveal bowl flow fitted with wasted outlet.

Timer

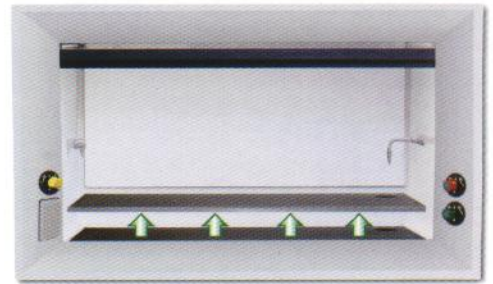
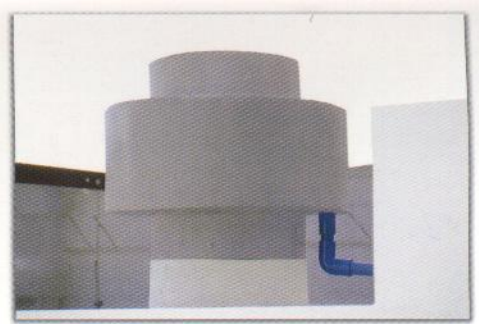
24 hours timer with selectable switch 10-15 minute sensitivity for blower working ability to showed the present time.

Testing

Air velocity is checked by **ANEMOMETER** at 100 FPM. while the door opening at 30 cm. height from the floor.

Warranty

12 months, Lifetime service



Superflow Specification

MODEL	TOP (w x D x H) (cm.)	STORAGE (w x D x H) (cm.)	WORKING AREA (w x D x H) (cm.)	OUTLET PIPE Ø (Inch.)
<i>Super Flow 100</i>	100 x 90 x 150	100 x 80 x 85	75 x 70	8
<i>Super Flow 120</i>	120 x 90 x 150	120 x 80 x 85	95 x 70	8
<i>Super Flow 150</i>	150 x 90 x 150	150 x 80 x 85	125 x 70	10
<i>Super Flow 180</i>	180 x 90 x 150	180 x 80 x 85	155 x 70	10
<i>Super Flow 200</i>	200 x 90 x 150	200 x 80 x 85	175 x 70	10

Electricity

Main switch breaker 30 AMP.

Blower switch (visual light) with magnetic and overload for motor damage protection.

Fluorescent switch (visual light) with 2 sets of 18 watts fluorescent lamp covered with safety glass.

Electrical service (Double plugs type) with 2 or 3 legs plug, 10 AMP.

FUME CUPBOARD FAN

The fume cupboard fan have high resistance to corrosive gases and very good durability. The casings are rigid PVC, the impellers moulded in phenolic resin, and the motor protected by a sealing coat of polyurethane compound, In addition there is the inherent advantage of axial-flow design, permitting the simples layout of exhaust systems. The fume cupboard fan operates ideally in the fume cupboard application in school, college and education centers. Its non-overloading characteristic makes it easy to select and operate in this hostile environment.

Impellers

Made from noryl (phenolic resin) with stainless steel fixing.

Motors

Totally enclosed air stream rated to class F. All motors are totally sealed and designed to run for 10,000 hours over a 5 years period without attention.

Temperature Range

0° C to 40° C

Casing

The casing is made from rigid PVC with a duct terminal box complete with a breather pipe. It can only be connected by using Woods supplied cupboard and duct connectors



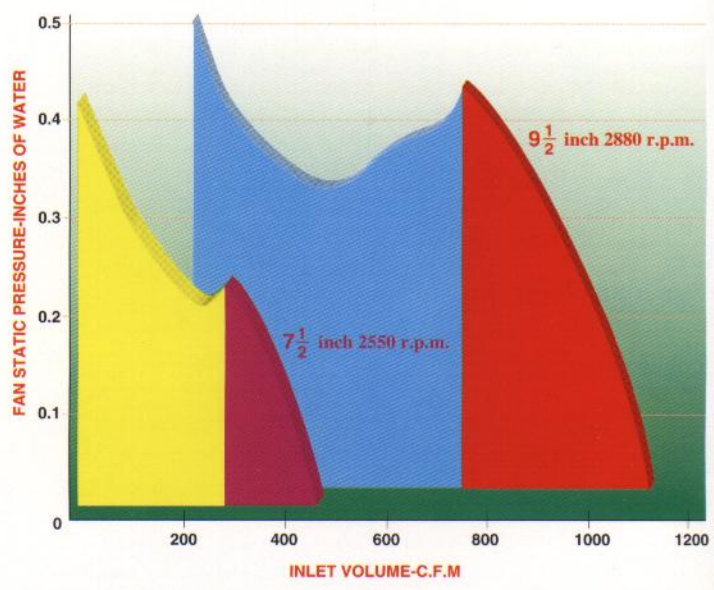
Resistance to corrosive reagents

- | | |
|--------------------|------------------------|
| Acetic Acid | Hydrogen Peroxide |
| Aluminium Chloride | Lctic Acid |
| Ammonium Chloride | Lead Acetate |
| Ammonium Sulphate | Magnesium Sulphate |
| Benzoic Acid | Oxalic Acid |
| Cadmium Cyanide | Potassium Ferricyanide |
| Calcium Chloride | Potassium Hydroxide |
| Citric Acid | Sodium chloride |
| Coppor Sulphate | Sodium Hydroxide |
| Cromic Acid | Sodium Thiosulphate |
| Diesel oil | Stannic Chloride |
| Ethylene Glycol | Sulphur Dioxide |
| Ferric Chloride | Sulphuric Acid |
| Formic Acid | Zinc Sulphate |
| Hydrochloric Acid | |

Fume Cupboard Fan Specification

MODEL	Blade ø (inch.)	Pipe ø (inch.)	Housing and Blade	Motor 220 V. 50-60 Hz.	Used in Superflow Model
AX 7.5	7.5	8	F.R.P*	90 Watts 2500 R.P.M	120
AX 9.5	9.5	10	F.R.P*	93 Watts 2800 R.P.M	150

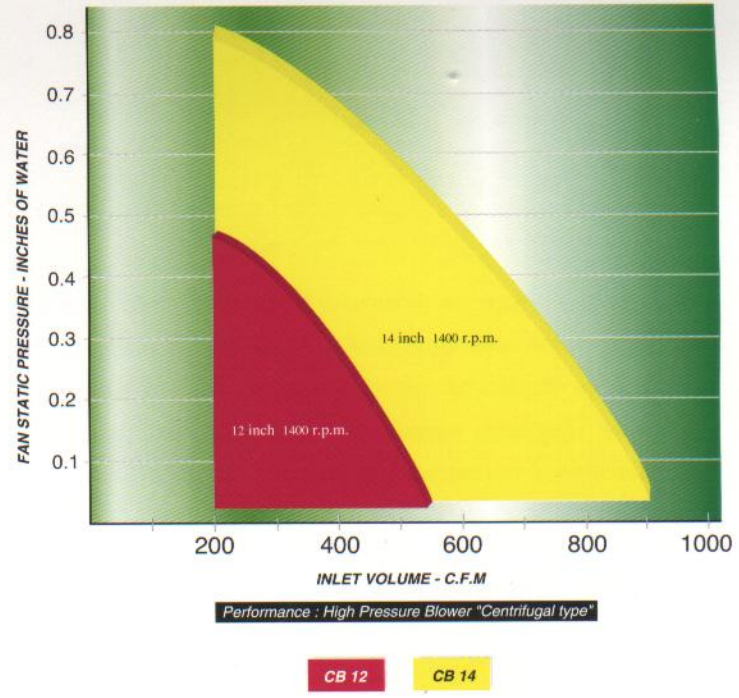
F.R.P* = Fiberglass Reinforced Polyester Resin



HIGH PRESSURE BLOWER

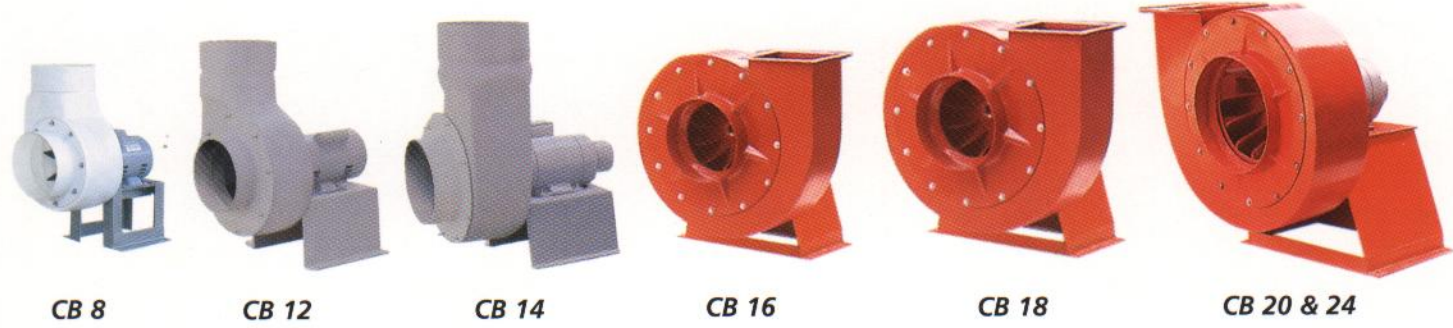
Centrifugal Type

The centrifugal blowers are made from fiberglass reinforced polyester resin (F.R.P.) in one piece molding which expressed for the purpose of corrosive fume extraction. The blower is aerodynamic shape without any adaptor to joined pipe line. Housing and blade are corrosion resistant from concentrated acid, base and solvent. The axial blade is dynamically balanced, direct coupling to induction motor without the belt and 1400 RPM. The blower stand is made from F.R.P. and reinforced with metal.



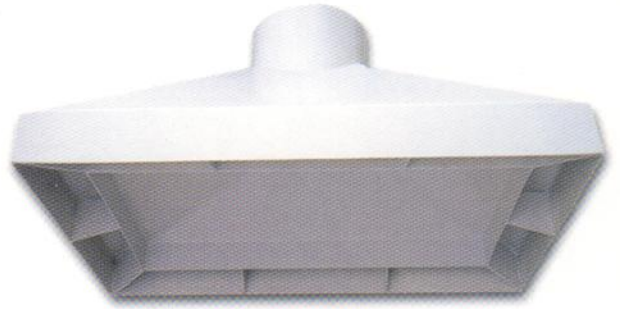
High Pressure Blower Centrifugal Type Specification

MODEL	Blade ø (inch.)	Blade Thickness (inch.)	Pipe ø (inch.)	Motor 220 V. 50-60 Hz.	Motor 380 V. 50-60 Hz.	Static Pressure
CB 8	8	3	6	1/4 HP	1/2 HP	12
CB 12A	12	4	6	1 HP	1 HP	20
CB 12	12	4	8	1 HP	1 HP	20
CB 14	14	5	10	1.5 HP	2 HP	28
CB 16	16	6	10	2 HP	2 HP	38
CB 18	18	8	12	2 HP	3 HP	40
CB 20	20	8	14	3 HP	5 HP	60
CB 24	24	10	16	5 HP	7 HP	100



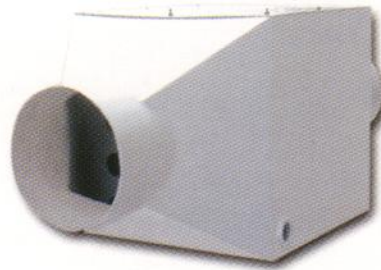
CANOPY

Major[®] Canopy is aerodynamic and well designed. Using double wall type, Canopy has qualify to elaminated the fume which is more condense than air, such as acid-base fumes. The canopy was produced from fiberglass reinforced resin which is chemical resistance. Canopy have many sizes depend on the working area from 0.50 m., 0.75 m., 1.0 m.,....., 3.0 m., as request



TRAPPING TANK

The experiment which used a large amount of acid-base for warming or boiling needs equipment to elaminated acid-base fume before sending into the air. Especially, the system which has no the elamination of acid-base at the end of pipe is very hazardous. Short pipe or static air condition can cause less distribution of acid-base fumes. Trapping tank can solve this prolem by accelerate the acid-base fume condensation.



TRAPPING TANK SPECIFICATION

Tank Structure	Fiberglass
Tank Size	50 x 50 x 50 cm ³
Condensing Process	Wind circular attack with 4 multiple half curve
Filter	Polypropylene ø 2"
Inlet / Outlet	8" or 10" selectable



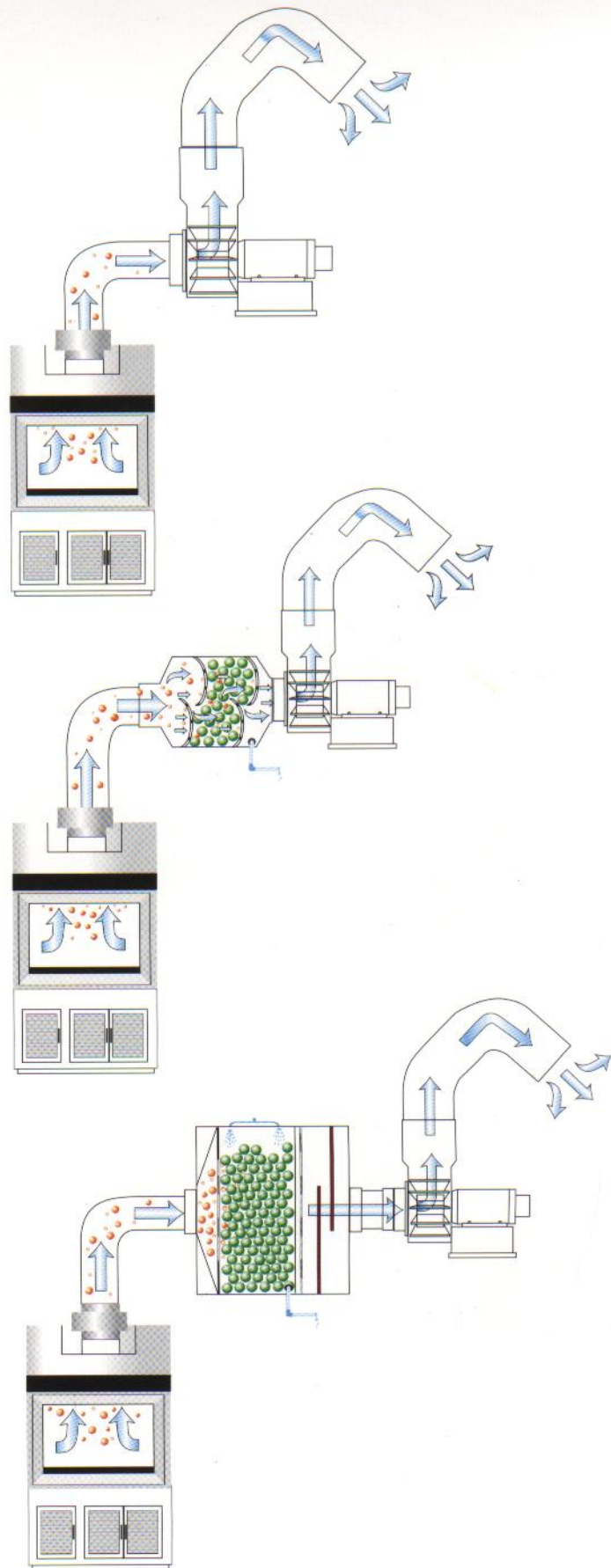
SCRUBBER

The elimination of acid-base fume by water is the easiest way to make the environment better. The fumes in the laboratory must be eliminated before emission through the air. In case of using large amount of acid-base for example, Digestion; acid-base fumes have to be treated before emitted through the environment. Treating process is passing these fumes into the pack-media tank in order to increasing the contact time between the fumes and water spray. Next, Passing its through 5 micron filter to separate water spray from treated fume (cleaned-air). Finally, The remain cleaned-air is emitted through the environment.

SCRUBBER SPECIFICATION

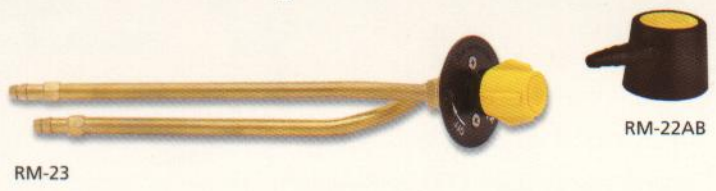
MODEL	DIMENSION (WxHxD)	SUPERFLOW FUME HOOD SIZE	P.P.M*
SCB 120	120 x 120 x 75 cm.	120 / 150	1,000
SCB 150	150 x 120 x 75 cm.	150 / 180	1,200
SCB 180	180 x 120 x 75 cm.	200	1,500

P.P.M* = Polypropylene Pack Media



*Remote control valve with polypropylene handle
DIN 12920 B color coding panel
Epoxy electro-plating
300° F coating valve*

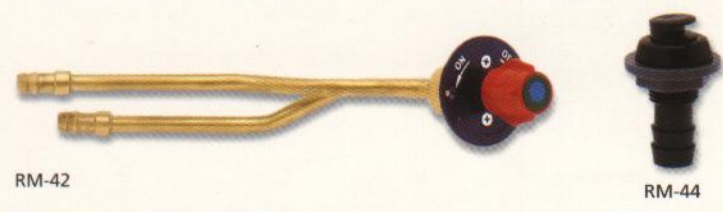
Remote control valve for Low Pressure



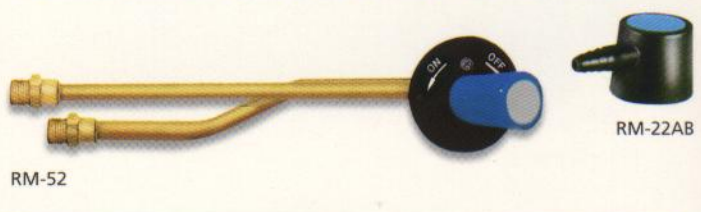
Remote control valve for Hot or Cold Water



Remote control valve for Automatic Cleaning System



Remote control valve for High Pressure Gases



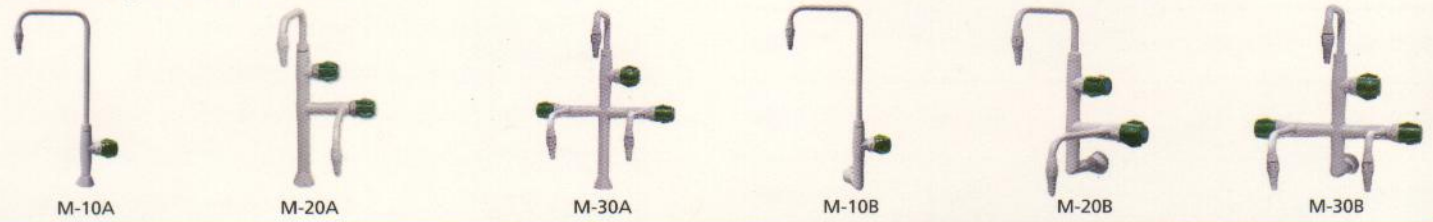
Low Pressure gas valve for bench or wall



High pressure gas valve for bench or wall



Water valve for bench or wall



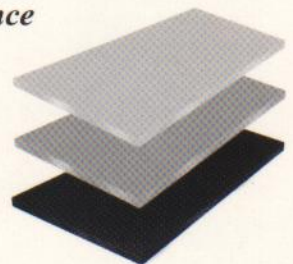
Drainage System

*Polypropylene sink ø 6 " (ø 5.5 " inner)
complete with polypropylene bottle trap,
corrosion and removable jointed to
drainage line with P.V.C pipe.*



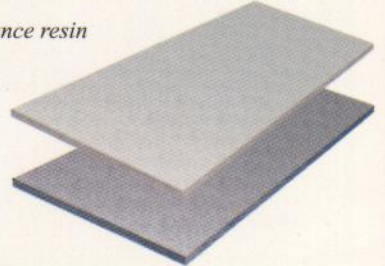
High-Grade Chemical Resistance

*16, 22, 26 mm. Thick of Epoxy Resin,
more than 1.90 density value, in ash,
darkgrey and saphire color can be
changing to the work top for special
experimentation. For example;
experiment with high temperature
more than 1 hour with concentrate
acid, etc.*



Chemical Resistance SIRENA PLATE 6 mm. Thickness

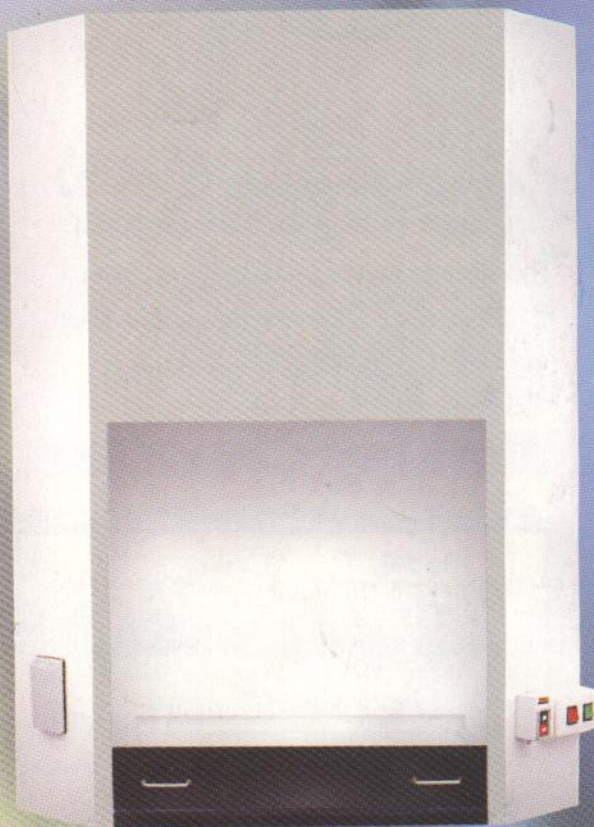
Reinforced with chemical resistance resin



ECON 100 Fume Cupboard

ECON 100 fume cupboards are manufactured from fiber glass reinforced polyester resin (F.R.P.). There is no metal in the structure. It was designed for counter corner with HEXAGON type. All ECON model fume cupboard install automatic by-pass air flow system.

The counter balanced sash window use vertically sash type which supported on the cable (covered with plastic pipe for chemical fume protection) and running on ball bearing pulleys in which bullet are embedded in rigid nylon. Sash windows have 5 mm. acrylic and plastic handle.



Overall Dimension (cm.)	W	D	H
ECON 100	100 (Max)	58	140

Blower Specification	Model CB 12 A	Ø 12" Blade
	1HP. 1400 RPM	220 V. 50 Hz.

