



# AIR VENTILATION UNITS

## SACFT Series



### HIGHLY EFFICIENT AIR VENTILATION UNITS

#### SACFT Series

Leading manufacturer of technologically Advanced Fresh Air / Exhaust Air Units Specifically designed and developed for high performance, reliability and energy efficiency.



## SAGAR AIR PVT. LTD.

# Introducing SACFT Series

## Fresh Air / Exhaust Air Ventilation Units

SAGAR AIR Air Ventilation units for Fresh Air and Exhaust Air applications are backed with design and manufacturing capabilities of more than 30 years. These are compact modular units, which can be customized to meet your needs of varying filtration requirements, air volumes, static pressures and arrangements.

The construction provides greater flexibility to meet any kind of space constraints using horizontal, vertical and ceiling suspended mounting.

**SACFT** Series can serve across a diverse range of applications and sectors. You name it, we have a solution! Some of the applications are listed below:

### Salient Features :

- Capable of delivering 3400 CMH upto 60000 CMH.
- Can Cater to Static pressures ranging from 400 Pa to 1500 Pa.
- Different filtration requirements from 20mic to 0.03mic.
- Available in Double Skin and Single Skin options.
- Range covers Horizontal, Vertical and Ceiling Suspended type.
- Suitable for installation in shopping arcades, offices, restaurants, hotels, schools, multiplexes, theaters, control rooms, pharmaceuticals and a variety of other comfort and industrial applications.
- Suitable for Fresh air blowing into the space and exhausting the contaminated air with proper filtration into the atmosphere.

### Applications:

Pharmaceuticals  
Clean Rooms  
Movie Theatres  
Industrial Canteens  
IT Industries

Offices  
Hotels  
Poultry farms

### Sectors:

Healthcare  
Industrial  
Commercial  
Defence  
Education

**Low Noise**

**High Operational Performance**

**Zero Leakages**

**Low and Inexpensive Maintenance**

**Compact Unit**

**Rigid Construction**

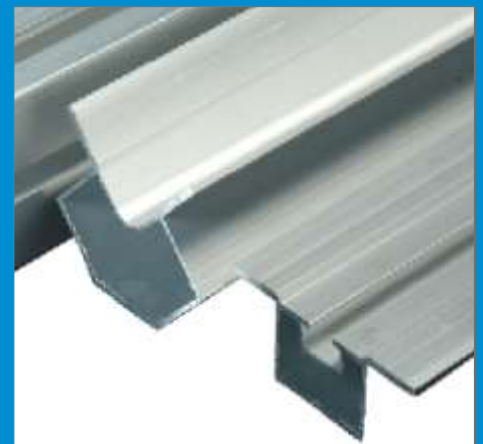


# Construction Features

High Durability. Guaranteed.

## Cabinet Frames :

- Rigid Framework made of hollow extruded Aluminum profile held together by Nylon corner joints.
- The extruded aluminum profiles are covered from inside which is available as a standard feature to provide smooth edges.
- The Double Skin sandwiched panels with inner skin made of 24G ( 0.6 mm) galvanized sheet conforming to IS-277 standards. Outside panel is made of pre-painted 24 G galvanized sheet.
- Double Skin panel of 24 mm thickness is provided.
- Panels are pressure injected with PUF insulation using a CFC free R-141b blowing agent.
- High and uniform PUF density of 40 kg per cubic meter provides better thermal insulation and sound attenuation.
- A leak proof casing ensures Indoor Air Quality by preventing the entry of contaminated air into the equipment.
- EPDM foam gaskets on Al frame provide superior sealing from casing leakages.
- Base frame is rugged in construction, made of galvanized steel with intermediate cross members and has lifting holes for easy installation
- The unit is provided with high quality, properly hinged Inspection Doors and Windows to have proper accessibility for regular maintenance.



## Blower Section

- Energy Efficient AMCA Certified, forward / backward curved / Airfoil fans are provided. Plug fans are available as an option.
- Electric motor of TEFC type IP55 and Class F insulation.
- Fan and motor are mounted on a common extruded Aluminum channel / GI heavy gauge pressed channel using anti vibration spring mounts and flexible Fire retardant canvas connection for silent and vibration free operation.
- Motor is mounted on easy slide mounting bracket for easy adjustment.
- Drives are selected for optimum performance. Taper lock Pulleys are used.
- Electrical interlock trips the fan immediately on opening of AHU door to ensure absolute safe operation.

### Standard Accessories :

- Service doors are provided with ease of access to the fan, motor and pump.
- Marine Lamp is provided for better visibility during servicing.
- View port is provided for inspection during the Air washer unit operation
- Door limit switches are provided to trip the Fan motor to ensure safety.



### Filter Section :



#### Pre-Filter :

The most commonly used pre-filter in the HVAC industry, available in cleanable / washable media for simple and economical maintenance. It's workhorse is designed to provide maximum life. It is an excellent choice as a pre-filter to higher efficiency filter.



#### Bag-Filter :

The Bag filter is a low cost filter for less challenging applications. The filter incorporates high performance synthetic media featuring progressive density and high dust holding capacity and meets the cleanability requirements of many HVAC applications, Comprehensive range of standard and customized sizes are available.



#### Fine-Filter :

Filters particles down to 5 or 3 microns, with an efficiency of 99.9%. Superior quality non-woven synthetic filter media with regular labyrinthine structure being built of synthetic fibres, which are bonded together by a special resin. This media is sandwiched between two layers of HDPE mesh, which acts as a retainer. Large number of pleats of the media enhances the filtration area for better efficiency.



#### HEPA Filter :

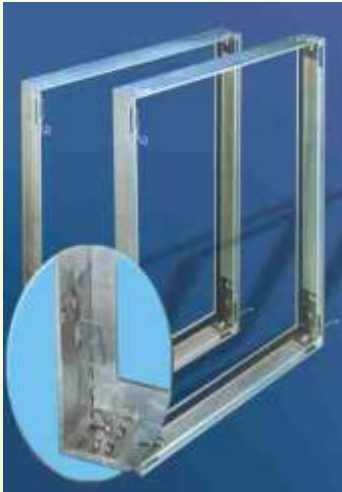
HEPA (High Efficiency Particulate Air) filter is constructed from high quality microglass media and uses corrugated aluminum separators. The filter is sealed to the frame with two-part polyurethane adhesive to ensure zero leakage.





#### Odour Filter :

Odour Gas Phase IAQ filters are a versatile, high efficiency combination filter (particle and molecular) used to effectively remove odour associated with diesel fumes, hydrocarbons, tobacco smoke, cooking, Volatile organic compounds (VOC) in public and commercial buildings.



#### Universal Filter Holding Framing Systems :

Sagar Air Universal filter Holding Frames are designed for simple and cost effective construction / remodeling of filter banks. Its unique modular design is ideal for quick and hassle free installation at site. The frames come in variety of standard sizes and can also be delivered in custom made sizes. The frames come with 4 quick spring clips to ensure positive sealing. Filter installation with these clips is easy and eliminates the use of time consuming nuts and bolts. Filter change time is reduced by more than 75% in most cases. The holding frames are made in Extruded Aluminum, Galvanized steel and Stainless Steel construction. A silicone free gasket is provided with the holding frame.

Variations available to fit Bag filters (25mm), Pre Filter (50mm), combination Pre-Filter + Bag (50mm + 25mm) and for 150mm and 300mm deep Fine and HEPA Filters.

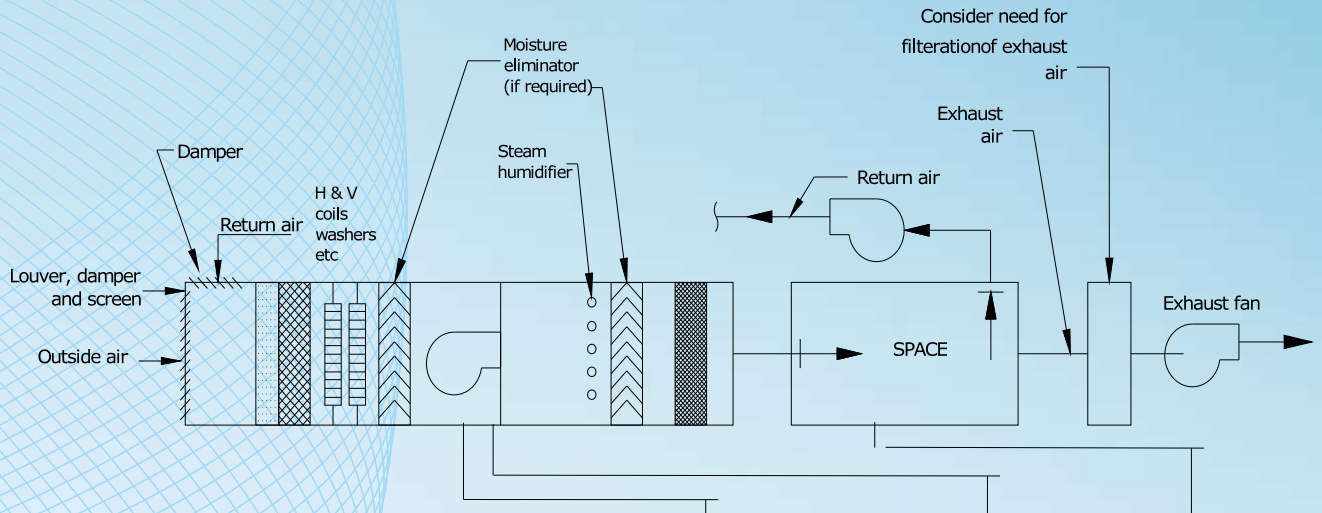
#### Filter Section



#### Fan Section

#### Rigid Double Skin Construction

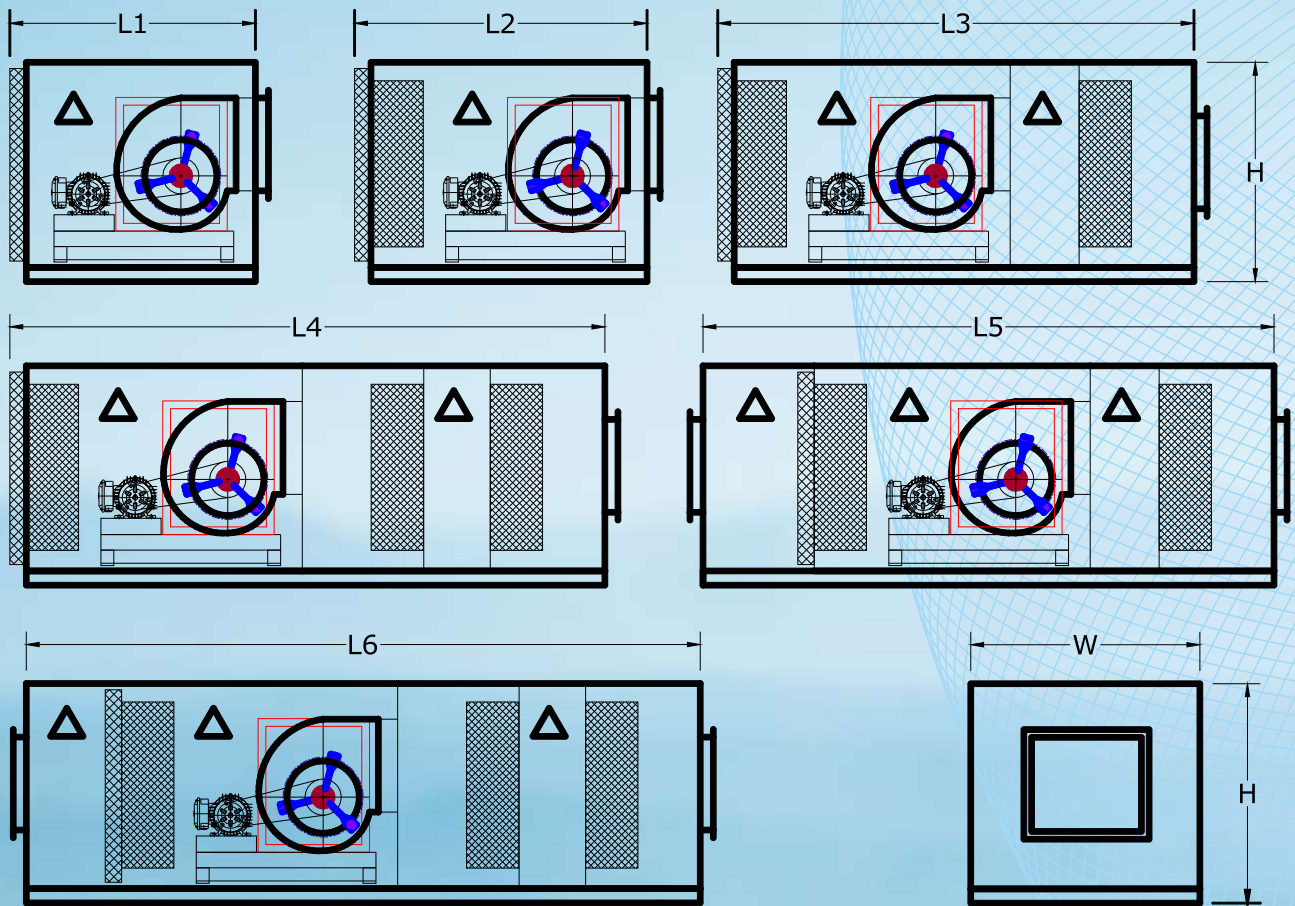
# Filter Application Classification :



Application	System Designator	Prefilter		Prefilter/Filter		Final Filter	Application Notes
Warehouse, storage shop and process areas, mechanical equipment rooms, electrical control rooms, protection for heating and cooling coils	A1	None	None	50 to 85% arrestance	None	None	Reduce larger particle settling. Protect coils from
	A2	None	None	25 to 30% dust spot	Pleated panel or extended surface	None	
Special process area, electrical shops, paint shops, average general offices and laboratories	B1	None	None	50 to 85% arrestance	Pleated panel or extended surface	None	Average housecleaning. Reduces lint in airstream. Reduces ragweed pollen >85% at 35%. Removes all pollens at 60%. somewhat effective on particles causing smudge and stain.
Analytical laboratories, electronics shops, drafting areas, conference rooms, above-average general offices	C1	75 to 85% arrestance, 25 to 40% dust spot	Extended surface, cartridge, or bag type	>98% arrestance, 80 to 85% dust spot	Bag-type, cartridge, or electronic (semi-automatic)	None	Above average housecleaning. No settling particles of dust. Cartridge and bag-types very effective on particles causing smudge and stain, partially effective on tobacco smoke. Electronic types quite effective on smoke.
	C2	None	None	>98% arrestance, 80 to 85% dust spot	Electronic (agglomerator) with bag or cartridge section	None	
Hospitals, pharmaceutical R & D and manufacturing (non-aseptic areas only), some clean ("gray") rooms.	D1	75 to 85% arrestance, 25 to 40% dust spot	Extended surface, cartridge, or bag type	>98% arrestance, 80 to 85% dust spot.	Bag-type, cartridge, or electronic (semi-automatic)	95% DOP disposable cell	Excellent housecleaning. Very effective on particles causing smudge and stain, smoke and fumes. Highly effective on bacteria.
	D2	None	None	>98% arrestance, 80 to 85% dust spot.	Electronic (agglomerator) with bag or cartridge section	None	
Aseptic areas in hospital and pharmaceutical R & D and manufacturing. Clean rooms in film and electronics manufacturing,	E1	75 to 85% arrestance, 25 to 40% dust spot	Extended surface, cartridge, or bag type	>98% arrestance, 80 to 85% dust spot.	Bag-type, cartridge, or electronic (semi-automatic)	>99.97% DOP disposable cell	Protects against bacteria, radioactive dusts, toxic dusts, smoke, and fumes.

# Technical Specifications :

Sophisticated Engineering. Guaranteed.



Unit		FAN	AHU - mm		AHU Lengths - mm					
Model	CFM	Model	W	H	L1	L2	L3	L4	L5	L6
SACFT-225	1500	225	720	795	900	1200	2300	3000	2700	3400
SACFT-250	2250	280	1035	795	1100	1400	2500	3300	2900	3700
SACFT-315	3375	355	1035	1110	1300	1600	2700	3500	3100	3900
SACFT-355	4500	355	1135	1340	1300	1600	2700	3500	3200	4000
SACFT-400	6000	400	1440	1340	1400	1700	2800	3700	3300	4200
SACFT-450	7500	450	1440	1655	1600	1900	3000	3900	3500	4400
SACFT-500	9000	500	1440	1960	1700	2000	3100	4000	3600	4500
SACFT-560	11250	560	1755	1960	1800	2100	3200	4100	3700	4600
SACFT-630	13500	630	2060	1960	1900	2200	3400	4300	3900	4800
SACFT-710	15750	710	2060	2275	2100	2400	3600	4500	4100	5000
SACFT-710H	18000	710	2060	2580	2100	2400	3800	4700	4400	5300
SACFT-800	21000	800	2375	2580	2300	2600	4000	4900	4600	5500
SACFT-800H	24000	800	2580	2680	2300	2600	4000	4900	4600	5500





## **SAGAR AIR PVT. LTD.**

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