

eco

ECOLOGY UNIT FROM EXCELAIR



Excelair Eco

Applications

The Excelair Eco unit is the optimum solution for any odour control application. The unit is used to arrest Oil & Grease and to eliminate the Smoke & Dust Particles from the kitchen as per ASHRAE 52.2 / EN Filter standards, while minimizing the smell/odour from kitchen cooking exhaust. The unit is widely used for kitchen ventilation system in Hotels, Foodcourts, Restaurants, Hospitals, Schools, Malls, Commercial buildings, Colleges and other places.

Features and Benefits

Solves kitchen ventilation problems by offering custom-made designs and solutions

Removes all grease and smoke particles over the service life of the filters

Reduces cooking odour to minimal levels

The unit can be located in ceiling space, on roof tops or in designated mechanical room

Commercial kitchens can now be located in areas where there are no provisions for grease ducts

Unit Construction

Excelair Eco units are factory assembled , rigidly constructed , Pre coated Double skin with Puff Insulation. The Frame is aluminum extruded profile to provide extra rigidity to the unit . The option of MS with Powder coated casing is also available . The unit modules are mounted on heavy duty GI rails for easy Installation and Transportation .

The units are available in different airflow volumes ranging from 500 CFM to 4000 CFM .

The units can be supplied as a single unit or as separate modules which can be easily assembled at site .Magnehelic Gauges or Differential pressure switches are provided across filter sections to ensure the unobstructed operation and timely maintenance of the units .

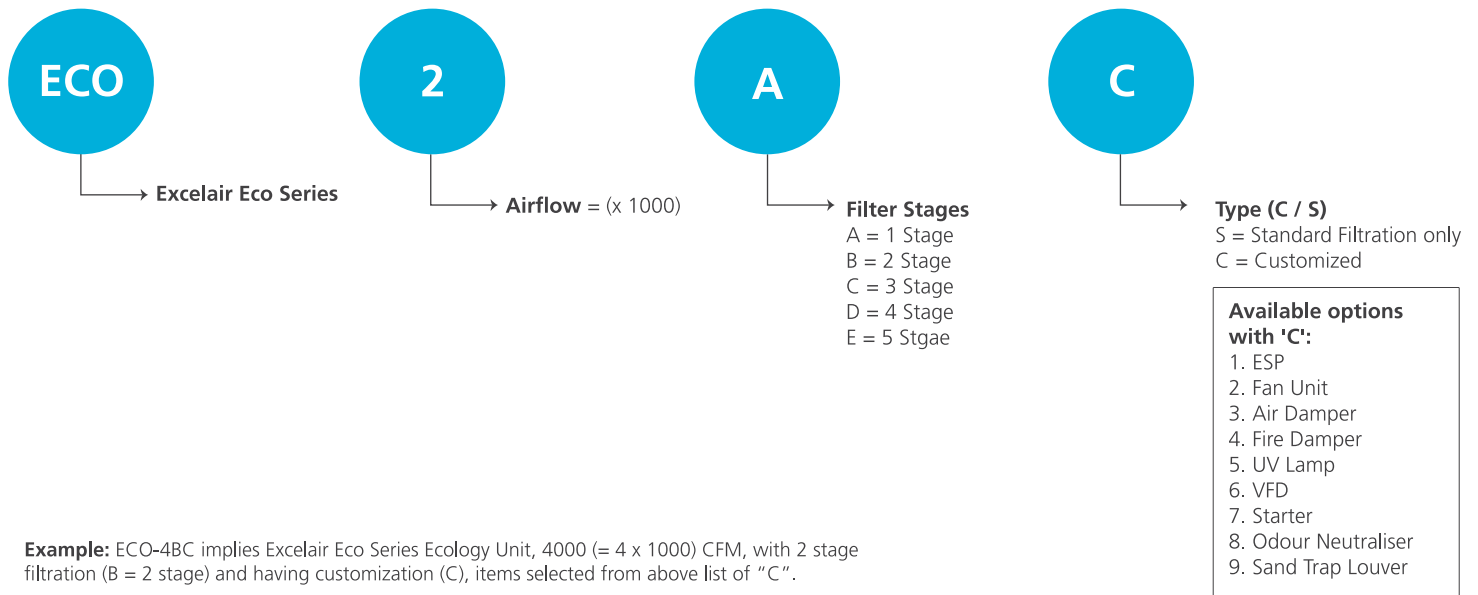
The Excelair Eco unit comes with side access hinged doors and U channel for easy access to filters for Installation and maintenance . The Excelair Units comes with Filters with high dust holding capacity and very less Pressure drop which minimizes the load on Fan/Blower Hence the units are capable of saving around 20% power in comparison to typical arrangement units .



Excelair Ecology units, a multi stage Filtration System, is designed to eliminate the Oil, Grease, Dust Particles , Smoke and Odour from the kitchen exhaust. The units are engineered and constructed to meet today's international standards to keep the environment clean. Thanks to the state of art engineering, Excelair Eco meets all requirements of commercial kitchen and ventilation standards and local governments' environmental Air quality standards. The Excelair Ecology units are easily mountable on Roof-tops, Kitchen ceilings or any other area in the HVAC system's Exhaust Air stream or any mechanical room.

| EXCELAIR ECO APPLICATIONS | EXCELAIR ECO BENEFITS |
|--|---|
| <ul style="list-style-type: none"> ■ Hotels & Restaurants ■ Food Court ■ Hospitals ■ Schools & Colleges ■ Shopping Malls ■ Commercial buildings & other places | <ul style="list-style-type: none"> ■ Removes Oil/Grease ■ Removes Dust Particles ■ Removes Smoke ■ Minimizes and Reduces the Smell / Odour ■ Filtration Performance as per the ASHRAE / EN ■ Designed according to the Commercial kitchen standards |

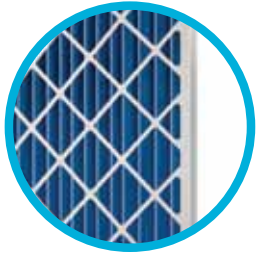
EXCELAIR ECO MODEL NUMBERING



Example: ECO-4BC implies Excelair Eco Series Ecology Unit, 4000 (= 4 x 1000) CFM, with 2 stage filtration (B = 2 stage) and having customization (C), items selected from above list of "C".

EXCELAIR ECO FILTER MODULES

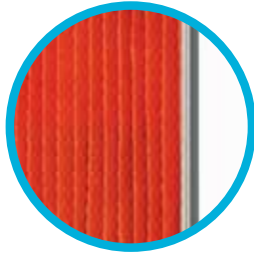
The Excelair Eco unit comes with five stages of filtration with multiple filtration options to meet customers' requirements. Excelair Eco gives customer a freedom to choose from any of the below range of filters as per requirement or to meet standards. The filters are monitored with the Magnehelic gauges or with DP switches to ensure the performance of the filters.



EXCELAIR ECO | PRE FILTRATION
EXCELAIR CDPSC

- Synthetic High Dust holding capacity Low Pressure Drop, Light weight Cardboard frame Disposable Throw away filter
- The G3/G4 as per ASHRAE / EN 779 grade filters, to arrest the coarse particles from the Kitchen air stream.
- The average arrestance efficiency is between 80-95%.
- UL Listed filter.

(For more details, please refer the Excelair CDPSC catalogue.)



EXCELAIR ECO – FINE FILTRATION
EXCELAIR CDP60

- Synthetic High Dust Holding capacity ,Low pressure drop , Light weight Cardboard Frame Disposable Throw away filter
- The M5/M6 as per ASHRAE / EN 779 grade filters , to arrest the fine particles from the kitchen exhaust air stream .
- The average fractional Efficiency of of CDP 60 would be 80%@0.45

(For more details, please refer the Excelair CDPSC catalogue.)

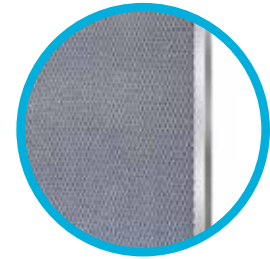


EXCELAIR ECO – FINE FILTRATION
EXCELAIR ULTRAPAC

- Synthetic media with melt blown high duct holding capacity and low pressure drop Pocket filter .
- The MERV 13 / F7 grade as per ASHRAE / EN 779 grade filters, to arrest the fine particles from the Kitchen Air stream.
- The Avg Fractional Efficiency of the Ultrapac-F7 would be 85%@0.45µ
- UL Listed filter.

Excelair have wide options for Fine Filtration.

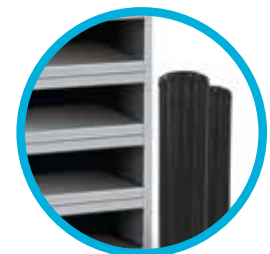
(For more details, please refer the ExcelAir Ultrapac catalogue)



EXCELAIR ECO - OIL / GREASE REMOVAL
EXCELAIR METALLIC FILTER

A 4" Excelair Metallic Panel filter for Removal of Oil Grease from the kitchen. The Washable Filter made up of 304 grade Stainless steel material with drain holes.

(For more details, please refer the ExcelAir Metallic catalogue)



EXCELAIR ECO
ODOUR MODULE

The Odour Module comes with two options of chemical filtration- the CACU and CCYL to remove or minimize the odor from the Kitchen Exhaust system.

Excelair CACU filters are made up of activated carbon or chemically impregnated granules filled in deep bed panels, arranged in a V-shape, and encased in a metallic box with proper sealing to prevent air bypass.

Excelair CCYL filter are also made up of activated carbon or chemically impregnated granules filled and encased in a canister type refillable modules, thus making CCYL filters apt for long-term use.

The granules in CACU and CCYL filters are capable of removing high level concentrations of airborne molecular contaminants and odour from air stream. The granules can be Activated Carbon or Chemical impregnated or blend of both.

- Tray type CACU or Cannister type carbon granules filled Modules for the Odor removal from the Kitchen Exhaust.
- 60% CTC Activated Carbon granules Media
- The Quantity as per the Dwell time calculation.
- Chemisorbing media also available
- Available with Chemisorbent + Carbon Media

(For more details, please refer the ExcelAir CACU / CCYL catalogue) Available with Chemisorbent + Potassium Permanganate Media

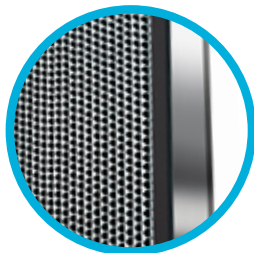


EXCELAIR ECO – FINE FILTRATION
EXCELAIR ASHRAE Cell

- Deep pleated microglass fiber media with corrugated aluminum separator style medium.
- The MERV 14 / F8 grade as per ASHRAE / EN 779 grade filters, to arrest the coarse particles from the Kitchen Air stream.
- The Avg Fractional Efficiency of the ASHRAE Cell - F8 would be 95% @ 0.45 microns

Excelair have wide options for Fine Filtration.

(For more details, please refer the ExcelAir Ashrae Cell catalogue)



EXCELAIR ECO – MICROFINE FILTRATION
EXCELAIR BIO HEPA / EPA

- High Efficiency Micro glass fiber media with aluminum separators , Rigid Box Filter, to arrest the Micro Fine particles in the Kitchen Exhaust Airstream.
- The BIO Hepa / EPA filter shall have the Absolute efficiency of 95%@0.3µ as per MIL/DOE
- The filter shall have the classification grade of E10 as per EN1822.
- The filter are supplied along with the Test report.

(For more details, please refer the ExcelAir BioHepa catalogue)

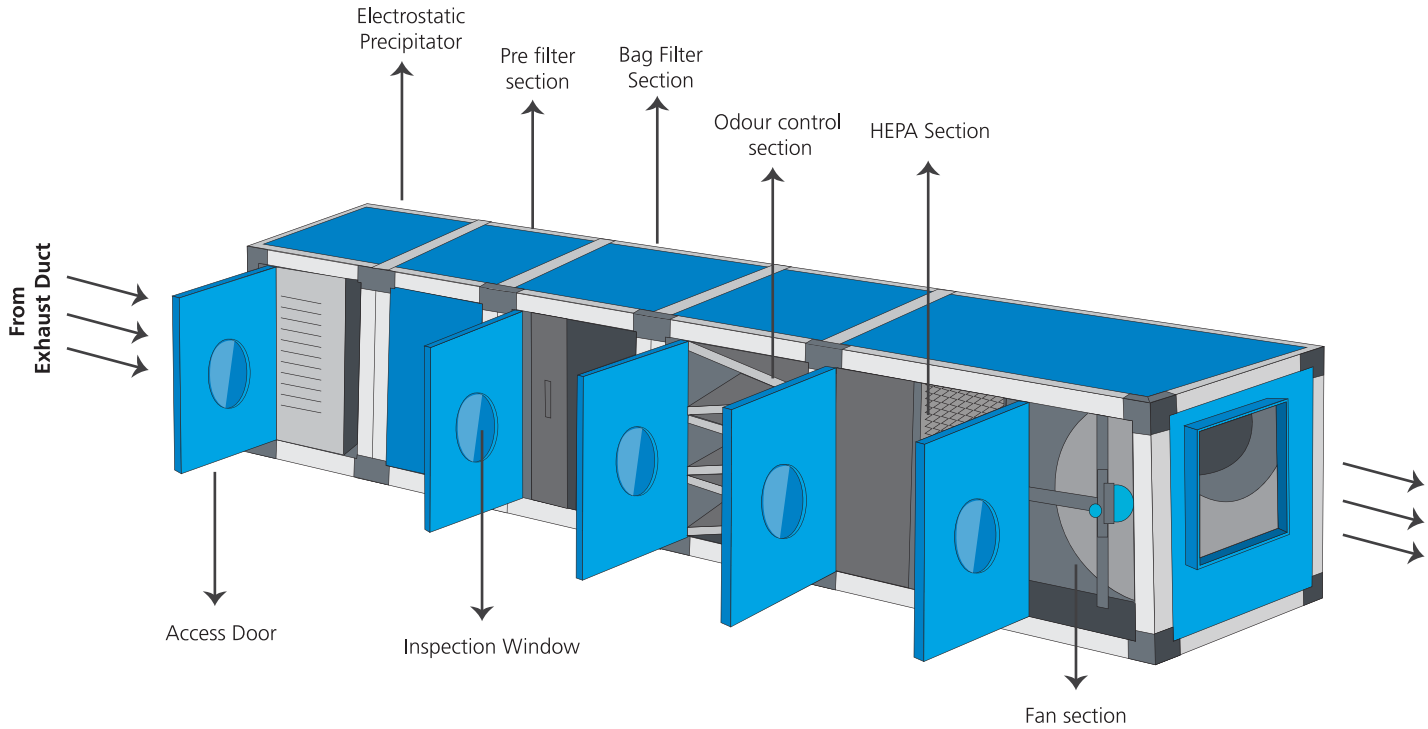


EXCELAIR ECO – MICROFINE FILTRATION
EXCELAIR HEPA HV

- Micro Fine glass fiber media , High efficiency rigid box filter, to arrest the micro Fine particles in the kitchen exhaust air stream.
- The Minipleat V-type High Volume/Velocity Filter shall have the Absolute efficiency of 99.99%@0.3µ as per the MIL/DOE standard and 99.95%MPPS as per EN 1822.
- The filter shall have the classification grade of H13 as per EN1822.

(For more details, please refer the ExcelAir Hepa HV catalogue. For other filters, please contact factory)

EXCELAIR ECO ISOMETRIC VIEW



CMS has developed a wide range of filters to meet the requirement as per applications.

Following options can be chosen from different range of filters:

Stage 1:

Electrostatic Precipitators

- Excelair EP Series (EP30 / EP60 / EP90)
- AQE Smokemaster Series (F72A / F72B / F72C)

Stage 2:

Pre filters

- Excelair Metallic Filters
- Excelair Disposable type filters (CDPSC)
- Excelair Polyfiber Filters (CPIR / CPMG)

Stage 3

Fine Filters

- Excelair Pleated Fine Filters (CDP60)
- Excelair Ultrapac Bag Filter
- Excelair ASHRAE Cell Filters
- Excelair V-Cell FG Filters

Stage 4

Carbon Filters

- Excelair Cassette Type Carbon Filters (CACU)
- Excelair Canister Type Carbon Filters (CCYL)

Stage 5

HEPA Filters

- Excelair Bio-HEPA Filters
- Excelair HEPA HV Filters



UL Listed Filters

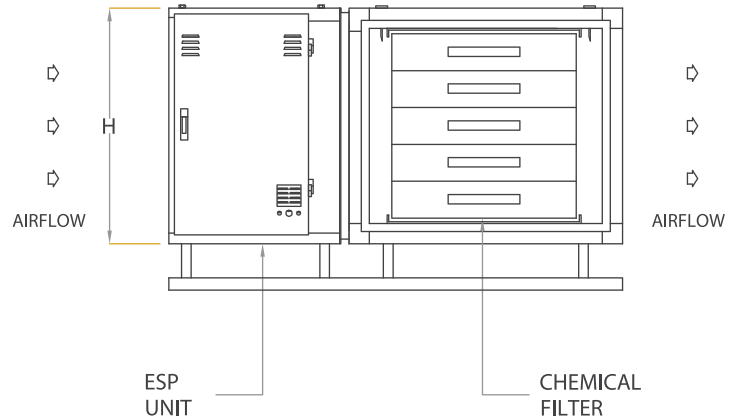
EXCELAIR ECO

ESP + CARBON FILTER MODULE

Excelair Ecology Units with ESPs (Electrostatic Precipitator) increases the efficiency of arresting oil, grease and fumes making it best suitable for kitchen extraction applications. For the desired performance Excelair ESPs are usually mounted before carbon filter module.

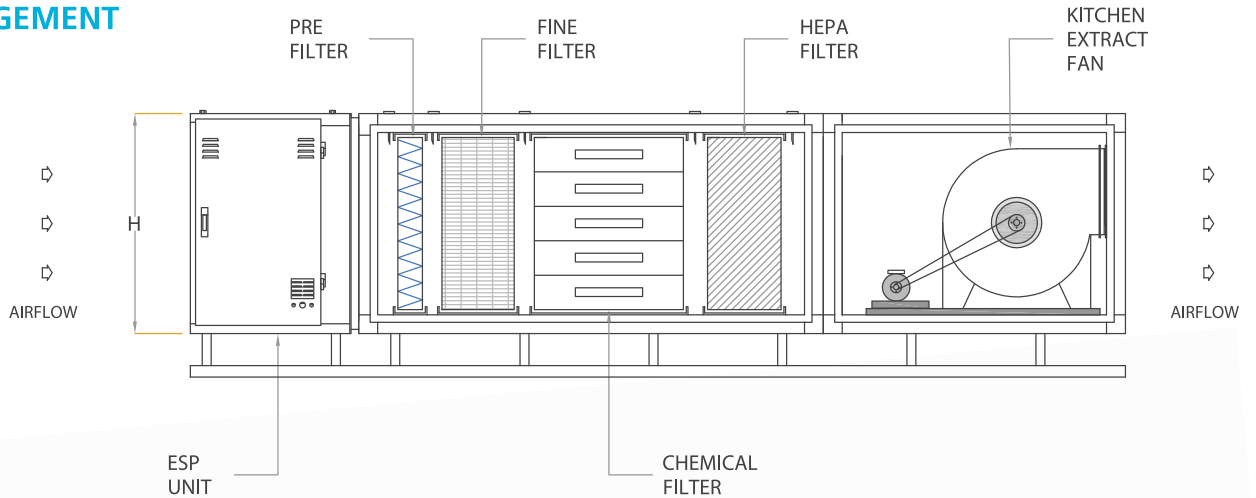
To cater to the various customers' needs of higher air volume, Excelair Eco is designed with versatility allowing multiple ESPs and carbon modules to be stacked together at site. The weather proof coating makes Excelair Eco units suitable for outdoor installation.

(Contact factory for further info)



EXCELAIR ECO

SECTION ARRANGEMENT



EXCELAIR ECO ODOUR NEUTRALIZER

To encapsulate and treat cooking odours being emitted from restaurants and other commercial cooking applications, odour neutralizer can be used. The odour neutralizer reduces the odours emanating from cooking premises by as much as 90%. Once the airstream in the exhaust duct has the majority of the particulate contaminants removed by filter units or ESP, the gaseous phase or odour can then be treated by the odour neutralizer. Excelair provides odour neutralizer using chemically formulated neutralising agent, which is finely balanced blend of oils and other chemicals, to neutralise cooking odours.

Major Advantages:

- Compact design
- Easy to maintain
- Easy to install
- No airflow resistance



EXCELAIR ECO FAN MODULE

Excelair ecology units are optionally supplied with the Centrifugal belt driven or DIDW type blower. The fan is rated for both sound and air volume as per AMCA standards, and it is statically and dynamically balanced. The fan motor comes with protection class of IP 55 .

The blower module comes with a fully removable access panel to allow for service and adjustment of belts.

The fan section includes a centrifugal blower assembly constructed of heavy gauge steel with non-overloading characteristics. The motor comes with V-belt or direct drive with capacity 25% greater than rated motor horsepower. The blower and motor mounting base are equipped with vibration isolators.

The discharge from the blower section can be:

- Straight through
- Left side discharge
- Right side discharge
- Vertical discharge

(For more details about the Fan, please contact factory)

EXCELAIR ECO FAN CONTROL PANEL

The fan control panel is made of high gauge painted steel, hinged type with air/water tight gasket construction making it suitable for outside installation. The fan can be controlled by variable frequency drive as optional. The control panel consists of VFD display unit, fan function ON/OFF indicators, direct drive (VFD off mode), bypass control, temperature shut off controls, and emergency shut off option buttons.





Products from



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