

EXCELAIR V-CELL FG FILTER

HIGH EFFICIENCY MINI-PLEAT RIGID BOX FILTER | MEDIUM & FINE



SPECIFICATIONS

Type	V – Bank, Rigid Pocket
Filter Grades (EN 779:2009)	M6, F7, F8, F9
Filter Grades (As per ASHRAE 52.2)	MERV 12, MERV 13, MERV 14, MERV 15
Filter Media	Micro Fine Glass Fiber
Media Separator	Thermoplastic bead separators (Hot Melt Beads)
Frame	Plastic (ABS)
Maximum Humidity	100%
Maximum Temperature	80 °C
Final Pressure Drop	2.00" wg
Maximum Recommended Pressure Drop	2.50" wg
Recommended Maximum Operating Velocity	625 fpm

Application

- Gas Turbine
- Rotary Equipment's
- Hospital
- Clean Rooms
- Biomedical
- Pharmaceutical
- Biotechnology
- Laboratories
- Food processing
- Semiconductor fabrication

Features & Benefits

- Alternative to bag filters & box type high efficiency filters
- Minipleat construction provides greater airflow capacity and low resistance
- High Strength glass fiber media and polyurethane potting combined to give the filter a High Burst Resistance
- Large filter surface with compact robust construction
- Maximum dust holding capacity extends the life of filter, minimizing operating costs
- Fully Incinerable
- Non – Metallic Construction
- Lightweight and easy to install

MODEL REFERENCE NUMBERING SCHEME

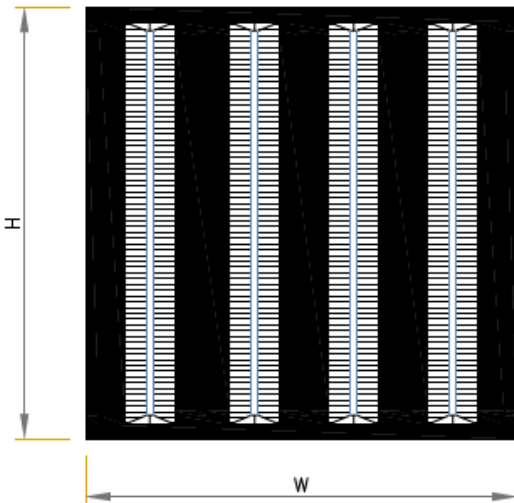
EVCFGF-24x24x12-F8

- E – Excelair
- VCFGF – V-CELL FIBER GLASS FILTER
- 24x24x12 – Width x Height x Depth
- F8 – Grade

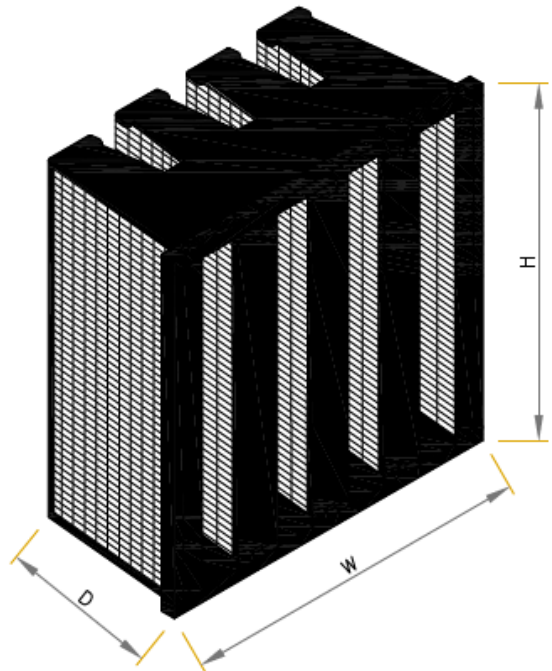
As a part of continuous improvement, CMS reserves the right to make technical modifications without prior notice.

Model Reference	Dimensions (Inches)			EN 77 9	ASHRAE 52.2 Standard	ASHRAE	Airflow (CMH)		Initial Resistance (Inches WG)		Final Resistance (Inches WG)	Media Area (Sq.m.)
	Width	Height	Depth				Dust Spot	Velocity @ 2.54 m/s	Velocity @ 3.81 m/s	Medium		
						Medium		High				
EVCFGF-24x24x12-F9	24	24	12	F9	MERV 15	98%	3400	5095	0.49	0.75	2	18
EVCFGF-24x20x12-F9	24	20	12	F9	MERV 15	98%	2805	4250	0.49	0.75	2	15
EVCFGF-24x12x12-F9	24	12	12	F9	MERV 15	98%	1700	2550	0.49	0.75	2	9
EVCFGF-24x24x12-F8	24	24	12	F8	MERV 14	95%	3400	5095	0.40	0.62	2	18
EVCFGF-24x20x12-F8	24	20	12	F8	MERV 14	95%	2805	4250	0.40	0.62	2	15
EVCFGF-24x12x12-F8	24	12	12	F8	MERV 14	95%	1700	2550	0.40	0.62	2	9
EVCFGF-24x24x12-F7	24	24	12	F7	MERV 13	85%	3400	5095	0.36	0.56	2	18
EVCFGF-24x20x12-F7	24	20	12	F7	MERV 13	85%	2805	4250	0.36	0.56	2	15
EVCFGF-24x12x12-F7	24	12	12	F7	MERV 13	85%	1700	2550	0.36	0.56	2	9
EVCFGF-24x24x12-F6	24	24	12	F6	MERV 11	65%	3400	5095	0.31	0.49	2	18
EVCFGF-24x20x12-F6	24	20	12	F6	MERV 11	65%	2805	4250	0.31	0.49	2	15
EVCFGF-24x12x12-F6	24	12	12	F6	MERV 11	65%	1700	2550	0.31	0.49	2	9

SIZE SELECTION



FRONT VIEW



GENERAL ISOMETRIC VIEW

EXCELAIR CCRV

MICROGRANULATE CARBON RIGID BOX FILTER



- Improve indoor air quality through effective removal of contaminants, odors and gases
- Available with activated carbon for adsorption, Potassium Permanganate for chemisorptions, or a 50/50 blend of both.
- 100% fill for maximum single pass efficiency and longer service life

CCRV model Excel Carb filters utilizes a micro-granulate adsorbant particle embedded in dual layer filter media, close mini pleated and bonded to a rigid V shaped frame construction. This offers a very large surface area, and low pressure drop. The high activity rate made CCRV model filters the right choice for HVAC and micro-electronics applications. The filter frame has a 25 mm / 20 mm peripheral header which allows easy installation in side or front mounting and withdrawal frames. CCRV model carbon filters are available in standard sizes .

CCRV DESCRIPTION

The filter is designed to remove a wide range of odors and common indoor air pollutants at high air flows. Constructed of heavy-duty galvanized steel and plastic, Carbon media packs, the filter can be filled with one of two media or a blend of the two to fit any application.

CCRV BENEFITS

The filter provides effective odor removal with just a moderate increase in pressure drop. Using 60% CTC activated carbon, potassium permanganate on zeolite, or a blend of the two, the filter removes a broad spectrum of compounds including Volatile Organic Compounds (VOC's), vehicle exhaust, sulphur compounds, ammonia and other gases.

APPLICATIONS

These filters are used in commercial and industrial applications where odors and gases need to be removed to protect people, processes, equipment or artifacts.

With a standard header it can be used in existing HVAC systems, easily retrofitted or specified for new construction. The dual direction design allows for a front or reverse mount installation, without a reduction in filter performance.

The Method of Removal of Odor from Air

The method of contaminant removal is through a combination of the physical property of adsorption and the chemical process of oxidation.

SELECTION CHART

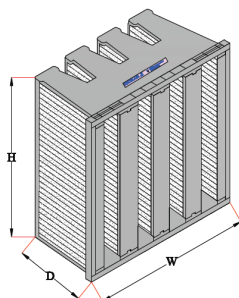
Filter Type	Filter Size (inch)	Carbon Weight (Kg)	Resistance Vs face velocity (Pa)	
			250 fpm	500 fpm
CCV1	24X24X12	4.80	30	70
CCV1	24X20X12	4.00	30	70
CCV1	12X24X12	2.30	30	70

Contaminants removed by Activated Carbon

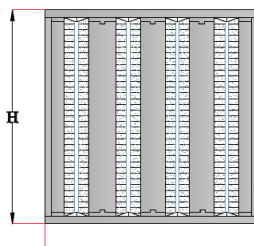
Acetone	Gasoline	Naphtha	Perchloroethylene
Benzene	Methylene Chloride	nitrobenzene	Pyridine
Chlorobenzene	Methyl Chloroform	Ozone	Styrene
Chloroform	Methyl Ethyl Ketone	Paint Fumes	Toluene

(*For other applications, contact factory)

SIZE SELECTION



isometric view



Front view

EXCELAIR HEPA HV FILTER

V-BANK CONSTRUCTION | HEPA



SPECIFICATIONS	
Type	V-Bank mini pleat construction
Filter Grades (EN 1822:2009)	E11 / H12 / H13 / H14
MPPS Efficiency	≥ 95% / ≥ 99.5% / ≥ 99.95% / ≥ 99.995%
DOP Efficiency @ 0.3μ	≥ 98% / ≥ 99.97% / ≥ 99.99% / 99.999%
Filter Media	Micro glass fiber paper media
Media Separator	Hot melt bead
Frame	SS / GI / Al / MDF / ABS
Media Sealant	Two part Poly-Urethane
Gasket	Seamless PU / Neoprene
Maximum Humidity	90%
Maximum Temperature	70 °C
Final Pressure Drop	2.00" wg (Recommended)
Fire Rating	UL Classified

Application

- Hospital
- Biomedical
- Pharmaceutical
- Biotechnology
- Genetic Research
- Universities
- Laboratories
- Food processing
- Hospitality Industry
- Semiconductor fabrication

Features & Benefits

- High air volume up to 3000 CFM
- Excelair HEPA HV Filter utilizes micro glass fiber paper media in a minipleat v-bank construction. PTFE media optional.
- Standard galvanized steel frame. Optional SS, Aluminum, ABS or MDF frame.
- Each filter is scan tested individually per EN 1822, ensuring a leak proof performance. Test results are affixed by label to each filter.
- Mini-pleat media design with V shaped configuration ensures a large media area for maximum air flow resulting in lower pressure drop and increased filter lifetime.
- Comes with side handles.
- Mounting options: Excelair Ducted HEPA Housing, Ecology Units etc.

MODEL REFERENCE NUMBERING SCHEME

EHV-24x24x12-H13-2.0

E	– Excelair
HV	– HEPA HV
24x24x12	– Width x Height x Depth
H13	– Grade
2.0	– Airflow (x 1000 CFM)



SELECTION CHART						
Reference	Dimensions (Inches)			Filter Classification as per 1822	Airflow (CMH)	Initial Pressure Drop (Inch W.G)
	Width	Height	Depth			
EHV-12x12x12-E11	12	12	12	E11	1275	0.8
EHV-12x24x12-E11	12	24	12	E11	2550	0.8
EHV-24x24x12-E11	24	24	12	E11	5095	0.8
EHV-12x12x12-H12	12	12	12	H12	765	0.95
EHV-12x12x12-H12	12	12	12	H12	850	0.95
EHV-12x24x12-H12	12	24	12	H12	1565	0.95
EHV-12x24x12-H12	12	24	12	H12	1700	0.95
EHV-24x24x12-H12	24	24	12	H12	3230	0.95
EHV-30x24x12-H12	30	24	12	H12	5095	1.15
EHV-12x12x12-H13	12	12	12	H13	765	1
EHV-12x12x12-H13	12	12	12	H13	850	1
EHV-12x24x12-H13	12	24	12	H13	1565	1
EHV-12x24x12-H13	12	24	12	H13	1700	1
EHV-24x24x12-H13	24	24	12	H13	3230	1
EHV-24x24x12-H13-2.0	24	24	12	H13	3400	1
EHV-24x24x12-H13-2.4	24	24	12	H13	4080	1
EHV-24x24x12-H13-3.0	24	24	12	H13	5095	1.28
EHV-30x24x12-H13	30	24	12	H13	5095	1.2
EHV-12x12x12-H14	12	12	12	H14	765	1.12
EHV-12x12x12-H14	12	12	12	H14	850	1.12
EHV-12x24x12-H14	12	24	12	H14	1565	1.12
EHV-12x24x12-H14	12	24	12	H14	1700	1.12
EHV-24x24x12-H14	24	24	12	H14	3230	1.12
EHV-24x24x12-H14-2.0	24	24	12	H14	3400	1
EHV-24x24x12-H14-2.4	24	24	12	H14	4080	1.12
EHV-30x24x12-H14	30	24	12	H14	5095	1.28

All Grades and all sizes are available upon request. Please contact factory for more details.

SIZE SELECTION

