# FC Frame with Synthetic Media

Primary or Pre-Filters G2 – G4



#### **General Characteristics**

FC Frame sizes can be customised for use in Fan Coil Units (FCU) and Fresh Air Supply filters (FAF). The filter media is replaceable for FC frames. Fibreglass Media is suitable for use in oil mist, ink, paint arrestor applications. Impregnated Carbon synthetic media can be used for odour control. These filters are widely used as prefilters in FCU, FAF and AHUs of electronics & injectable production, pharmaceutical production, industrial and chemical processing, hospitals, laboratories, laboratories, public and office buildings, airport airconditioning systems, pulp, paper mills, oil refineries, gas turbines and plastics manufacturing.



- + Primary Filter with G2 G4 efficiencies
- + Custom sizes and depth
- + Synthetic Polyester, Fibreglass Media

+ Galvanised Steel (Gi), Aluminium Frame (Al), Stainless Steel 304 (SS), Moisture Resistant Kraft Board (KB)

#### Construction

#### Filter Media

The filter media is made from synthetic polyester with calibrated fibre density. The media is disposable or can be partially reusable 2-4times by washing with tepid water & detergent. Carbon, Fibreglass media are not washable.

#### FC Gi / FC AI / FC SS

The filter is enclosed with Aluminium, Galvanised Steel, Stainless Steel 304 or paper kraftboard frame. FC Frame comes with one corrosionresistant Galvanised, aluminium or Stainless Steel 304 expanded mesh which supports the filter media and on the other side, a Galvanised steel or Stainless Steel 304 Z-Zag retainer rod which can be removed for replacement of filter media. Can be linked with hinges Available size: <1200x1200mm Available Thickness: 10mm-95mm Optional: Support Steel for both sides>760mm

Application: Most Recommended All purpose use in ducted aircon, package or AHU/PAU/Fresh Air Fans.

#### 2DP and 4DP

The polyester media is pleated in 2" or 4" thickness and enclosed with Gi Frame and Wire bracket. Replacement Model FC FC media is easier to replace and maintain or Pleated (disposable) which is longer lifespan & better efficiency

#### FG Kraftboard

Fibreglass Media in Kraftboard is disposable and used for oil mist, ink, spray paint arrestor removal applications.

#### RP Ring panel

RP Ring Panel of 2 ply Synthetic Washable with internal 3-4mm wire Rod frame fully ultrasonic creates a leak-free seal. They can be linked together as flexible panels.

The filter can also be manufactured in various custom various sizes and thickness. Standard actual thickness of 21mm.

#### PP Mesh

PP mesh media is sealed on 3-4mm thick Galvanised steel or Stainless Rod as frame. Washable and reusable

#### Application Notes:

Used in residential for big particles like hair and fibres. Low Efficiency, low dust loading and lifespan



Description: Fibreglass in Kraftboard Nominal Size: 24 x 24 x 2" Actual Size : 595 x 595 x 45mm



Description: RP Ring Panel Washable Nominal Size: 24 x 24 x 1" 2 ply Synthetic Media



PP mesh w Gi Rod linked



FC Gi/Al Frame with Media Pad Typical Nominal thickness" 0.5,1,2,4" Actual Thickness 12,21,45,95mm



Unique SS Expanded Mesh for air filter and corrosion resistant applications FC SS304 Frame,SS304 Expanded Mesh, SS304 Z-Zag Rod Typical Nominal thickness" 0.5,1,2,4" Actual Thickness 12,21,45,95mm



2DP Pleated Washable, Gi Nominal Size: 24 x 24 x 2"



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### **Specifications**

Synthetic Washable Roll	EN779 Filter Grade	ASHRAE 52.2 MERV	Thickness mm	Rated Air Flow m³/h	Face Velocity m²/s	Net Effective Area m <sup>2</sup>	Average Atmospheric Dust Spot Efficiency (>1um) %	Average Synthetic Dust Weight Arrestance (>10um) %	Initial Pressure Drop Pa	Dust Holding Capacity g/m <sup>2</sup>	Others
T150	G2	MERV 3.4	5, 10	2008	1.5	0.372	<20	75	17	517	
T209	G3	MERV 6	15	2008	1.5	0.372	<20	87	35	400	
T350	G3	MERV 6	20	2008	1.5	0.372	<20	87	30	562	
NGB290	G3	MERV 6	20	2008	1.5	0.372	<20	89	38	478	
T500	G4	MERV 7	22	2008	1.5	0.372	<20	90	46	435	
ZKG Carbon	G3, G4	MERV 7	3, 12	2008	1.5	0.372	<20	94	44	377	CTC Rating > 60%
PP Mesh	G1	MERV 1	3	2008	1.5	0.372	<20	60	8	120	

Final Pressure Drop at 250Pa. Synthetic Washable media can be partially reusable by washing with tepid water and detergent. Impregnated Carbon cannot be renewed or washed.

Paintstop Roll FA500L	EN779 Filter Grade	ASHRAE 52.2 MERV	Thickness mm	Rated Air Flow m <sup>3</sup> /h	Media Velocity m²/s	Net Effective Area m <sup>2</sup>	Average Dust Spot Efficiency %	Average Paint Overspray Arrestance %	Initial Pressure Drop Pa	Final Pressure Drop Pa	Dust Holding Capacity g/m <sup>2</sup>	Others
PA200	G3	MERV 5-6	50-55	2500- 6300	0.70-1.75	1.00	<20	93-97	7-40	80	3600-4700	

Fibreglass media are suitable for oil mist, ink, sticky and paint arrestor removal applications.

Model	2DP	4DP	RP	
Description	Pleated S Wash	Ring Panel 2ply Synthetic Washable		
Nominal Thickness	2"	4"	1"	
Initial Pressure Drop at 2.5m/s	50	40	85	
Filter Class EN779 / Eurovent 4/4	G3-G4	G3-G4	G4	
ASHRAE 52.1-1992 Average Synthetic Dust Weight Arrestance	>8	5%	>90%	
ASHRAE 52.1-1992 Average Atmospheric Dust Spot Efficiency	20-2	25%	20-25%	
ASHRAE 52.2-1999 MERV	MER	MERV 7		
Media Area soft	45	9.0	0.37	

### Dimensions

Nominal Size L x H inches	Actual Size L x H mm	Rated Air Flow at Rated Velocity 1.5m/s cmh	Rated Air Flow at Rated Velocity 2.5m/s cmh	Weight kg
12 x 24	289 x 595	1000	1700	1.0
16 x 20	393 x 495	1110	1880	1.5
16 x 24	393 x 595	1330	2265	1.5
16 x 25	393 x 622	1380	2380	1.5
20 x 20	495 x 495	1380	2380	1.5
20 x 24	495 x 595	1660	2830	2.0
20 x 25	495 x 622	1730	2975	2.0
24 x 24	595 x 595	2000	3400	2.0

Data provided is for comparision and information. MERV: Minimum Efficiency Reporting Value

#### **Technical Data**

Filter Media

Synthetic Polyester Fibreglass (For Paintstop PA)

Enclosing Frame Galvanised Steel (Gi), Aluminium (Al) Option: Kraft Paper Board, Stainless Steel 304 (SS)

Faceguard Expanded Mesh Galvanised Steel (Gi), Aluminium (Al) Stainless Steel 304 (SS)

Retainer Rod Galvanised Steel, Stainless Steel 304 (SS)

Continuous Operating Temperature80°CRelative Humidity90%Recommended Final Pressure Drop100-150 Paor double of initial pressure drop250 Pa



#### 120 ZKG200-12mm 100 T500-22mm Initial Pressure Drop (Pa NGB290-20mm 80 T350-20mm 60 T209-15mm 40 T150-10mm 20 0 3400 1300 2000 2700 Nominal Air flow ( cmh )

Odd sizes can be custom fabricated accordingly. Width and height dimensions are interchangeable

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