

# RadiCel I

## HEPA Filters



RadiCel I, a box-type filter with extended filter surface, compact, lightweight and is widely used in various industrial, commercial and civil construction airventilation systems.

### Product Overview

#### ○ Wedge Shaped Pleat design

Double scored pleat in box shape, preventing media damage and help to prolong filter life. Corrugated aluminium separators to accurately maintain gaps for minimum resistance and maximum filtration efficiency.

#### ○ High Density Filter Paper

Specially selected high quality fiberglass, water-proof and high fire retardant.

#### ○ 100% Leak Proof

#### ○ Clean Production

All media filters are produced under ideal clean conditions, ensuring product quality.

#### ○ Efficiency level: H13, H14, a variety of sizes and materials

#### ○ UL 900 Certificated

### Bond

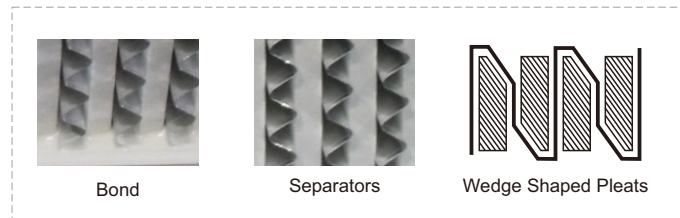
The media pack is thoroughly sealed to the inside of the cell sides with a variety of adhesives that prevent bypass leakage around the pack. The sealant totally encapsulates the media edges, closing off all leak paths. Close-up photo shows how the polyurethane bond, standard on most RadiCel I, expands into the pack as it cures, eliminating voids.

### Separators

Pleat spacing is precisely maintained by corrugated aluminum separators that permit maximum usage of the media at minimum resistance.

### Wedge Shaped Pleats

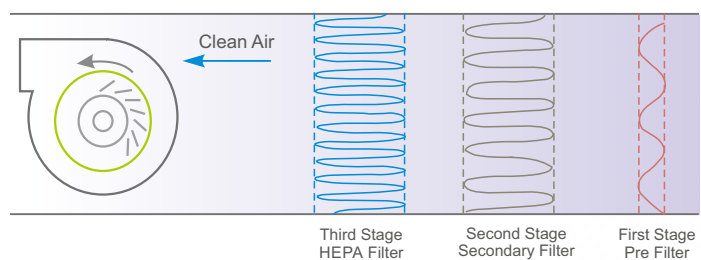
The 180° turn, forming each pleat of media on both sides of the filter, is wedge shaped. The media is double scored to form a box fold around the flattened ends of the separators. The uniform fit of the wedge shaped box fold pleats prevents media damage. Single score or rolled media pleating used in some competitive filters increases the risk of media damage caused by the sharp pointed crests of the corrugated separators puncturing the media.



### Typical Applications

- ▶ Schools & Universities
- ▶ Museums & Laboratories
- ▶ Food and Beverage
- ▶ Pharmaceutical
- ▶ Photo film processing
- ▶ Hospitality & Healthcare
- ▶ Microelectronics
- ▶ Semiconductor manufacturing
- ▶ Subway Station & Railway Station

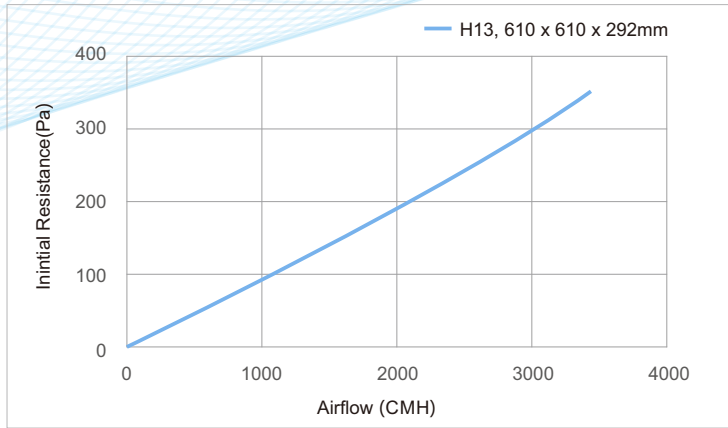
### Typical Three Stage Filter System (for particulate contaminants)



#### Professional Advice:

Use better quality pre-filters and medium efficiency filters so as to improve the lifespan of the HEPA filter, reducing both replacement and operating costs.

## Initial Resistance vs Airflow (High Capacity)



## Specifications

Model	RadiCel I / RadiCel I HC
Filter Depth	150, 220, 292mm
Efficiency	H13, H14
Media	Fiberglass
Frame Material	GI/SUS/AL
Separator	Waveform Aluminum
Max operating temperature	158°F (70°C)
Sealant	Polyurethane(PU)
Gasket	EPDM
Special Size Available	Yes

## Air Volume (Standard vs High Capacity)

H13 RadiCel I (610 x 610 x 292)mm	Standard	High Capacity
Air Flow Rate @ 350pa	1500CFM (2550CMH)	2000CFM (3400CMH)
Air Flow Rate @ 250pa	1000CFM (1700CMH)	1500CFM (2550CMH)
Lifespan	1	2

## Advantages of High Capacity Type

- ▶ Less filters required
- ▶ Smaller installation space needed
- ▶ Less replacement frequency, thus saving time and costs
- ▶ Longer lasting capability
- ▶ Better operating efficiency
- ▶ Save power

## Standard Size and Performance Parameters

Normal Size (Inches) H x W x D	Actual Size (mm) H x W x D	Velocity (m/s)	Airflow (CMH)	Initial Resistance (Pa)
<b>Standard Capacity, 11.5"</b>				
24 x 24 x 11.5	610 x 610 x 292	1.3	1700	250
24 x 12 x 11.5	610 x 305 x 292	1.3	850	250
12 x 24 x 11.5	305 x 610 x 292	1.3	850	250
<b>Standard Capacity, 8 2/3"</b>				
24 x 24 x 8 2/3	610 x 610 x 220	1.0	1350	250
24 x 12 x 8 2/3	610 x 305 x 220	1.0	675	250
12 x 24 x 8 2/3	305 x 610 x 220	1.0	675	250
<b>Standard Capacity, 6"</b>				
24 x 24 x 6	610 x 610 x 150	0.75	1000	250
24 x 12 x 6	610 x 305 x 150	0.75	500	250
12 x 24 x 6	305 x 610 x 150	0.75	500	250
<b>High Capacity, 11.5"</b>				
24 x 24 x 11.5	610 x 610 x 292	2.5	3400	350
24 x 12 x 11.5	610 x 305 x 292	2.5	1700	350
12 x 24 x 11.5	305 x 610 x 292	2.5	1700	350
<b>High Capacity, 8 2/3"</b>				
24 x 24 x 8 2/3	610 x 610 x 220	2.0	2550	350
24 x 12 x 8 2/3	610 x 305 x 220	2.0	1350	350
12 x 24 x 8 2/3	305 x 610 x 220	2.0	1350	350
<b>High Capacity, 6"</b>				
24 x 24 x 6	610 x 610 x 150	1.2	1700	350
24 x 12 x 6	610 x 305 x 150	1.2	800	350
12 x 24 x 6	305 x 610 x 150	1.2	800	350

Efficiency: H13;  
Dimensions: Can be customized according to customer requirements e.g. size and specifications.

