



# ASHRAE Grade V-CELL Extended Surface Air Filter

Testing Method	Dot Spot Efficiency (in NBS Testing Method)	Arrestance (in AFI Testing Method)	MERV
	90~95%	> 99%	14
	80~85%	> 98%	13
	60~65%	> 97%	11
By ASHRAE Standard 52.1-1992 (Equal to EN 779)		By ASHRAE 52.2-1999 Standard	

### Features:

- ※ With More Effective Media Area
- ※ With High Capacity
- ※ With Low Resistance
- ※ With High Dust Collection Capacity
- ※ With Longer Life Span

AIRREX V-Cell Air Filter is with multiple mini-pleat media packs and enable to remove air contamination, such as dust, smoke, vapor, soot, pollen, bacteria and etc. The unique V-Type design offers a wide range of efficiency to remove air contamination and provide a very low resistance. V-Cell filter offers high performance and low operating costs; it is ideal for the most difficult operating conditions:

- ※ High Velocity
- ※ Variable Air Volume System
- ※ High Humidity
- ※ Corrosion Environment

AIRREX V-Cell Air Filter is assembled by eight pieces of mini-pleat packs to compose of four (4) V Types. It contains more media (up to 40%) than standard W-Cell Air Filters. The effective media area results in greater flow capacity, lower resistance, higher dust collection capacity and longer life span. Operating range of Face Velocity is from 0 to 750FPM (0-3.81M/sec) for 12”(292mm) deep units.

### Efficiency:

Per ASHRAE 52.1-1982 standard, the filters have an average atmospheric dust spot efficiency range 60-65%, 80-85% and 90-95% (in NBS Test Method); per ASHRAE 52.2, the efficiency is MERV11, MERV12 & MERV14.

### Media:

V-Cell media is manufactured from water-resistant glass microfiber. The media is pleated from the filter pack and use hot melting glue to replace the traditional aluminum separators.

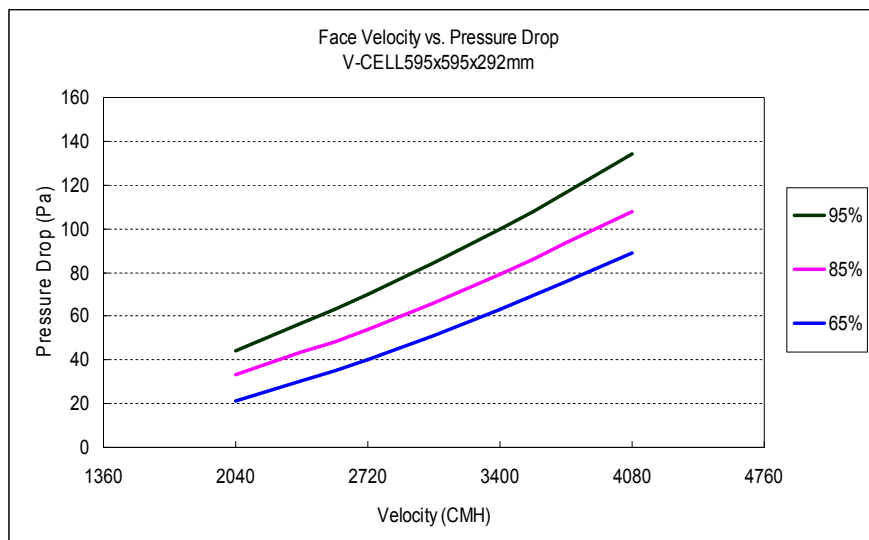
V-Cell media can withstand temperature up to 350 ° C. The connection between filter face and frame is sealed by fire retardant epoxy, polyurethane foam or silicon to ensure the filter leakage free.

### Outer Frame:

The frame is available for Metal Frame (Galvanized Steel, Aluminum and Stainless Steel) in box type or header type and ABS frame in headed type.

### V-Cell Air Filter Operating Conditions:

- ✧ Recommended Final Pressure Drop: 2.0”w.g.
- ✧ Maximum Final Pressure Drop : 3.2”w.g.
- ✧ **Guaranteed to withstand burst pressure:** 6.0”w.g.
- ✧ Actual Average Burst Pressure: 10.0” w.g.
- ✧ Relative Humidity: 100%



## Performance Data – ASHRAE Grade V-Cell Extended Surface Air Filter

Efficiency (%)		Nominal Size (W*H*D)	Actual Size (W*H*D)	Rated Capacity (CMH)	Pressure Drop (Pa)	
Dot Spot Efficiency (in NBS)	Arrestance (in AFI)	(inch)	(mm)		Initial Resistance	Final Resistance
90~95	> 99	12*24*12	289*595*292	1700	100	324
		24*24*12	595*595*292	3400		
80~85	> 98	12*24*12	289*595*292	1700	79	324
		24*24*12	595*595*292	3400		
60~65	> 97	12*24*12	289*595*292	1700	63	324
		24*24*12	595*595*292	3400		

\*Special Sizes are available upon request.

## Material and Service Conditions

Type		Description	
Construction	Media	Ultra-Fine Glass Fiber	
	Support Grid	Hot Melt Adhesive	
	Sealant	PU Base	
	Gasket Material	Neoprene Rubber	
	Frame Material	ABS Frame	Metal Frame
	Frame Type	Box Type	Single Header
Service Conditions	The maximum use temperature	°C	60
	The maximum continuous use temperature	°C	40
	Instant Highest Humidity	% RH	98 (No condensation state)



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