



TRI-CUBE RF/RFX
Reverse Flow
Cube Filters

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TRI-CUBE™ RF

Tri-Dim Filter Corporation has offered innovative solutions for filtration issues for over 50 years. The TRI-CUBE™ RF Reverse Flow Cube Filter follows in this tradition. These filters were engineered to solve a real world problem that is common in many HVAC applications which is limited space behind the filter bank for an extended surface filter.



Application photo showing filter track mounted directly in front of the coils.

THE PROBLEM

Often there is limited space downstream of the filter bank and this prevents the use of any type of extended surface air filters. This is commonly caused by the placement of coils or other HVAC components in close proximity to the filter bank - see photo left. The consequences of the inability to use an extended surface filter can be costly - increased filter change outs, premature replacement of expensive final filters, higher energy cost associated with high filter pressure drops.



TRI-CUBE RF downstream view - shows retaining hardware

THE SOLUTION

The TRI-CUBE RF (pictured left) is the solution. The TRI-CUBE RF projects upstream, away from obstacles, rather than downstream like traditional extended surface filters.

The use of an extended surface air filter reduces change-outs, extends the life of expensive final filters, reduces energy consumption and lowers the operating resistance.



TRI-CUBE™ RFX

The Tri-Cube Reverse Flow filters are also available in Tri-Cube RFX Reverse Cube version with an engineered and innovative center pocket which adds up to 50% more surface area than the original reverse cube - offering energy savings and longer service life. The Tri-Cube RFX offers a 20% to 65% reduction in operating resistance when compared to other filters with similar efficiencies. This translates into a significant cost savings in energy consumption which is the single largest cost component of life cycle cost of filters and potential LEED credits. The Tri-Cube Reverse Flow filters also offer 2½ to 4 times more dust holding capacity than traditional prefilters, the result is extended service life in HVAC systems - that translates into less filters to buy, change and discard.



TRI-CUBE RFX Frame

FRAME

The Tri-Cube RFX series utilizes a permanent metal retaining assembly that projects the cube filter upstream and offers the needed support for demanding applications. This hardware is so unique that it is patented by the US Patent and Trademark Office (#6,579,336 B1). The Reverse Cube filter simply loads over the top of the frame assembly and is secured by Velcro® strips on the permanent frame.



The TRI-CUBE RFX filters installed

MEDIA

Both styles of the reverse cube are available in the Tri-Dek® medias that have been trusted in the HVAC industry for over 40 years. Tri-Dek medias utilize different deniers of media that are arranged from the coarsest to the finest - this depth loading arrangement allows for particulate to be captured throughout the depth of the media unlike 'strainer' type medias that utilize only the surface to capture dirt. Tri-Dek 3 and 4-Ply medias contain post consumer recycled content - combine this with energy savings and extended service life and the Tri-Cube RF and RFX are an excellent choice for Green Building and Sustainability related initiatives.

TRI-CUBE RF/RFX

Technical Data

Specifications		TRI-CUBE™ RF - Reverse Cube Filter	RI-CUBE™ RFX - Reverse Cube with Center Pocket
Media		Synthetic, 2, 3 or 4 Deniers	Synthetic, 2, 3 or 4 Deniers
Frame		Galvanized Wire	Galvanized Wire
Final Resistance @ 500 FPM (2.54 m/sec)		1.0" WG (249 PA)	1.0" WG (249 PA)
Resistance 3/67 2-Ply @ 500 FPM (2.54 m/sec)	10" Deep (254 mm)	0.21" W.G. (52 PA)	0.17" W.G. (42 PA)
	15" Deep (381 mm)	0.17" W.G. (42 PA)	0.15" W.G. (37 PA)
	20" Deep (508 mm)	0.15" W.G. (37 PA)	0.13" W.G. (32 PA)
Resistance 15/40 3-Ply @ 500 FPM (2.54 m/sec)	10" Deep (254 mm)	0.22" W.G. (55 PA)	0.21" W.G. (52 PA)
	15" Deep (381 mm)	0.18" W.G. (45 PA)	0.17" W.G. (42 PA)
	20" Deep (508 mm)	0.17" W.G. (42 PA)	0.14" W.G. (35 PA)
Resistance XL 4-Ply @ 500 FPM (2.54 m/sec)	10" Deep (254 mm)	0.26" W.G. (65 PA)	0.25" W.G. (62 PA)
	15" Deep (381 mm)	0.20" W.G. (50 PA)	0.19" W.G. (47 PA)
	20" Deep (508 mm)	0.18" W.G. (45 PA)	0.17" W.G. (42 PA)
Media Area for a 24"X24" filter	10" Deep (254 mm)	9.0 Ft ² (0.84 m ²)	12.1 Ft ² (1.12 m ²)
	15" Deep (381 mm)	11.2 Ft ² (1.04 m ²)	16.7 Ft ² (1.55 m ²)
	20" Deep (508 mm)	14.0 Ft ² (1.30 m ²)	21.1 Ft ² (1.96 m ²)

LOCAL REPRESENTATIVE

Tri-Dim Filter Corporation is committed to continual product development - all descriptions, specifications and performance data are subject to change without notice. Tri-Dim products are manufactured to exacting criteria - there can be a ±5% variance in filter performance.