Tri-Pleat XM10 Max
MERV 10 Pleated
Panel Filters

TRIDIM

A MANN+HUMMEL Company

Tri-Pleat XM10 Max
MERV 10 efficiency in a metal-free design

Tri-Pleat XM10 Max provides MERV 10 efficiency with no metal components.

PARTICLE REMOVAL EFFICIENCY
Tri-Pleat XM10 Max vs other filters

MERV 7   MERV 8   XM10 Max

Tri-Pleat XM10 Max offers the ultimate level of performance; mechanical MERV 10 efficiency, no metal content, and a low, energy-saving pressure drop – umatched by any other pleated air filter.
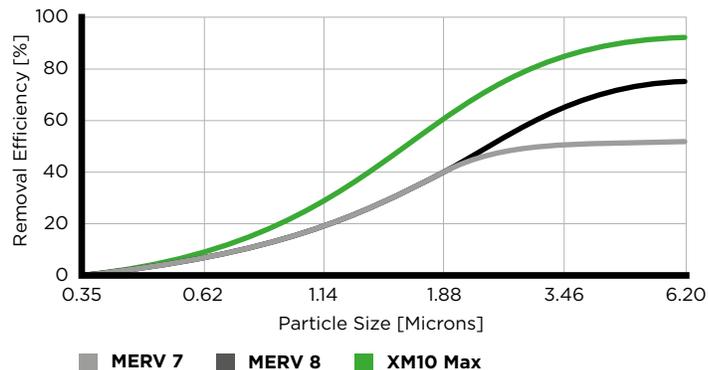
EFFICIENCY

The Tri-Pleat XM10 Max offers a mechanical MERV 10 efficiency. The graph above right shows the XM10 Max as well as a 'typical' MERV 7 and MERV 8 filter. Even though the differences may seem pretty insignificant - they can have a huge impact on airborne particle counts.

Looking at particles in the 4.0 – 5.5 micron range we see that if all three filters are exposed to the same number of particles in this size range, the MERV 8 will allow 73% more particles to pass through the filter than the XM10 Max. The MERV 7 will allow 205% more. All of these particles are headed straight for the HVAC coils.

Numerous studies have documented that even a small build up of contaminant on HVAC coils can have a huge impact on their efficiency. As little as 0.006" of build up can reduce heat transfer by 16%. Other studies show dirty coils can reduce efficiency by as much as 37%.

This can have a massive, detrimental impact on how long the HVAC system has to run to heat or cool a space - costing a lot of energy dollars.

PARTICLES CAPTURED PER 100,000

Particle Size	XM10 Max	MERV 8	MERV 7
4.0 – 5.5	83,600	71,600	50,000
7.0 – 10.0	92,600	74,800	52,000

Sustainable Energy-saving performance
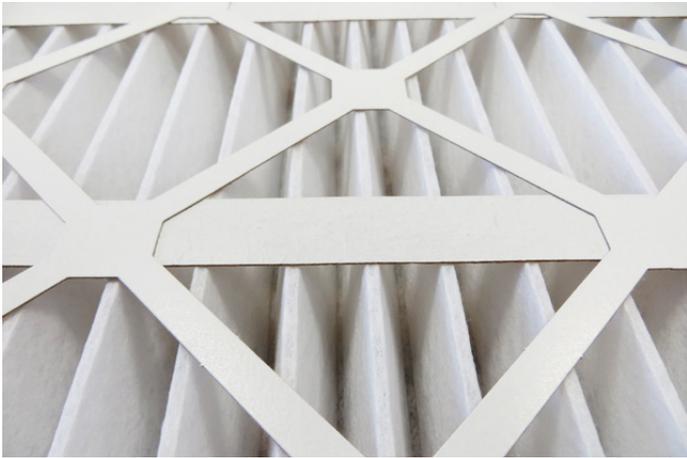
LOW PRESSURE DROP

Tri-Pleat XM10 Max offers a low resistance of 0.28 "W.G. at 2000 CFM (for a 24 x 24 x 2" filter) – up to 30% lower than similar products. In fact, XM10 Max delivers MERV10 efficiency at a lower resistance than many competitive MERV 8 pleated filters. This reduction in operating resistance can equate to significant energy savings, and is unmatched among wireless pleats.

CONSTRUCTION

Tri-Pleat XM10 Max utilizes a moisture resistant, die-cut frame with diagonal supports and horizontal strips bonded to the media pack for extra strength, and to maintain proper pleat spacing.

The pleat pack is bonded to a two piece frame. The media pack uses no metal and is exceptionally strong – meaning it can take significant abuse, and still retain its shape and pleat spacing. The XM10 Max withstood over four times its recommended final resistance during burst testing.

GREEN BENEFITS

The Tri-Pleat XM10 Max has many environmental benefits, such as reduced energy consumption that has already been mentioned. In addition, XM10 Max utilizes no dyes or metal in its components, and is completely incinerable.

The XM10 Max also has a MERV 10 efficiency, a substantial upgrade from the traditional MERV 7-8. This upgrade equates into cleaner coils and lower energy usage. This energy saving translates into reduced CO_2 emissions of over 137 tons per 100 filters. Eliminating the metal backing eliminates further emissions, so that each filter saves 1.38 tons of CO_2 per year.

POTENTIAL CO_2 REDUCTION PER 100 FILTERS

Cleaner coils energy savings	137.3 tons
No metal to landfill	0.31 tons
Total	**137.61 tons**

Tri-Pleat XM10 Max
Technical Data

SPECIFICATIONS

Product	Tri-Pleat XM10 Max
Media	Synthetic, mechanical
Frame	100% reclaimed fiber moisture. Resistant die-cut with horizontal strips – no metal
Final resistance	1.0 "W.G *(249 Pa)*
Resistance @ 500 FPM	2" deep: 0.28 "W.G. *(70 Pa)* 4" deep: 0.22 "W.G. *(55 Pa)*
Approx. sq. ft. of Media (per 1.0 sq. ft. of filter face area)	2" deep: 4.3 sq. ft. 4" deep: 5.9 sq. ft.
Efficiency	MERV 10 per ASHRAE 52.2

INITIAL PRESSURE DROP

vs Air Flow Rate
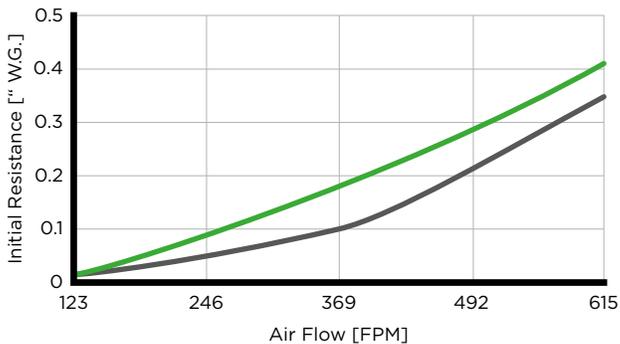
■ **2" XM10 Max**   ■ **4" XM10 Max**

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.

LOCAL REPRESENTATIVE