

**TRI-DEK® e<sup>2</sup>**

Environmental Series 100% Recycled Panel Filter





## FEATURES

- Constructed of 100% Recycled Media
- No Metal Components
- Easy Disposal - Shred, Compact or Incinerate
- 70% Storage and Freight Savings
- Tough and Durable Design
- Moisture Resistant
- Mold Resistant
- Eliminate Bypass of Unfiltered Air
- Enhanced System Efficiency
- LEED® Credits



## TRI-DEK® e<sup>2</sup>

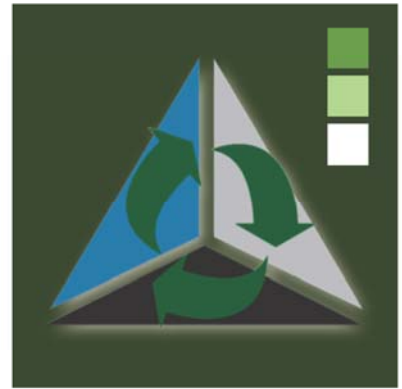
The TRI-DEK e<sup>2</sup> is the next generation in the long line of Tri-Dek Panel filters. Tri-Dim® Filter Corporation was founded by John Stanley in 1968 to fulfill John's vision of a better way to provide cleaner air - the Tri-Dek Panel was the result. Since 1968 Tri-Dim has continued to refine the Tri-Dek Panel and we are pleased to announce the latest member of the Tri-Dek family - the TRI-DEK e<sup>2</sup> Environmental Series Panel Filter.

The TRI-DEK e<sup>2</sup> panel filter utilizes 100% recycled media and a durable plastic grid frame in place of the traditional galvanized wire frame to offer more disposal options.

As with its predecessors the TRI-DEK e<sup>2</sup> Panel Filter improves the integrity of the HVAC system by eliminating the bypass of dirty, unfiltered air. This bypass can cause huge IAQ (Indoor Air Quality) issues if it allows bio-matter to accumulate and propagate in the HVAC system - essentially turning your HVAC system into a petri dish.



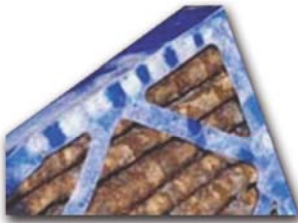
# Features and Benefits



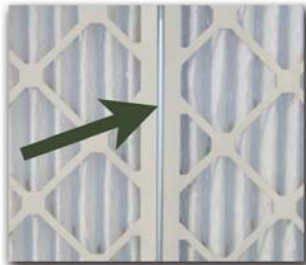
24 Pleated Filters next to  
24 TRI-DEK e² Panels



TRI-DEK e²'s Tough and Durable  
High Impact Plastic Frame



Effects of Moisture on a  
Cardboard Frame



Air Bypass with a  
Cardboard Frame

## Storage and Freight Savings - TRI-DEK e²

filters are packed twenty-four per case, that is in a smaller size box than twelve traditional pleated filters are packed in, resulting in a 70% reduction in freight and storage area and the benefit of reduced freight and storage cost. This also translates into less trips to the mechanical room. Reducing transportation related expenses can certainly be helpful in satisfying requirements of some Green Incentives.

**Tough and Durable Design** - Traditional pleated filters use a fragile cardboard frame to support the media, TRI-DEK e² filters utilize a sturdy plastic frame that can withstand the harsh treatment filters often experienced during shipping and handling.

**Moisture and Mold Resistant** - Another benefit of not relying on a cardboard frame filter is that cardboard frame will hold moisture and over time will deteriorate to the point the filter will frequently fall completely out of the frame and fall against the coil or get pulled into the fan. If the conditions are favorable a wet cardboard frame can also support microbial growth - like mold, mildew, and the list goes on and on. Reduction in moisture and microbial growth could be helpful in achieving IAQ requirements of some Green Initiatives.

**Bypass and System Efficiency** - TRI-DEK e² filters offer the advantage of self-sealing to eliminate the bypass of dirty, unfiltered air. Recent studies have documented the dramatic efficiency loss when air bypass gaps are present, these gaps are common when using traditional cardboard framed filters. The system's efficiency is far more important than the results of a filter tested in a controlled lab. Elimination of air bypass results in a higher 'real world' system efficiency.

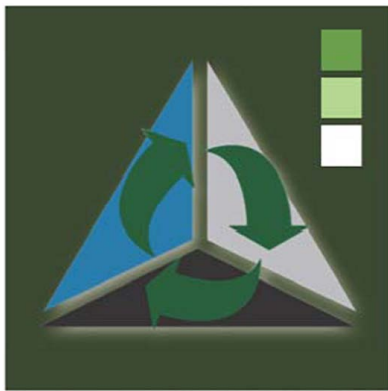
## LEED® Credits

### 1 to 5 Points

*Materials and Resources  
MR Credit 2.1-2.5:  
Optimize Use of  
Alternative Materials*  
stated intent is to  
"Reduce the  
environmental impacts of  
the materials acquired for  
use in the operations,  
maintenance, and  
upgrades of buildings."  
One of the definitions of a  
Sustainable Purchase is  
to contain at least 20%  
post-industrial material.  
One point is awarded for  
each 10% of qualified  
total purchases. Tri-Dek  
e² with 100% recycled  
content easily meets this  
qualification and is an  
easy first step toward a  
LEED point.

*From Green Building Rating  
System For Existing  
Buildings Upgrades,  
Operations and  
Maintenance Version 2*

Other credits may exist -  
please contact your local  
representative for more  
information



# TRI-DEK® e<sup>2</sup> Specifications

MEDIA

100% RECYCLED SYNTHETIC

FRAME

NYLON PLASTIC



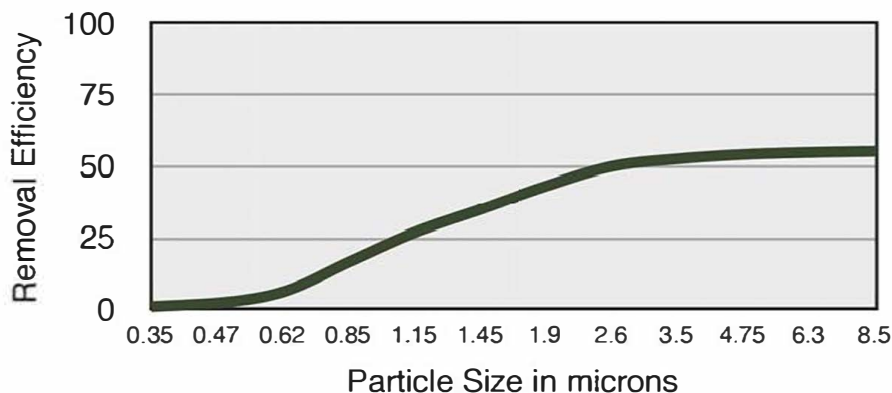
## Tri-Dim's Environmental Series

Tri-Dim is committed to a sustainable environment and is targeting the use of materials that help to accomplish this goal. For example, in the Tri-Dek e<sup>2</sup> filter Tri-Dim utilizes a media that is comprised of 100% recycled fibers and binder and we replaced the metal wire support with a more environmentally friendly high impact plastic frame that can be disposed of easier than the wire frame. The Tri-Dek e<sup>2</sup> filter can be shredded, compacted or incinerated.

Tri-Dim is taking our commitment seriously so continue to look for filters that are part of our environmental series.

Nominal Filter Size	Airflow	Pressure Drop	Airflow	Pressure Drop
12" x 24" 305 mm x 610 mm	800 CFM 0.38 m <sup>3</sup> /sec	0.24" WG 60 PA	1000 CFM 0.38 m <sup>3</sup> /sec	0.33" WG 82 PA
16" x 20" 406 mm x 508 mm	889 CFM 0.42 m <sup>3</sup> /sec	0.24" WG 60 PA	1111 CFM 0.52 m <sup>3</sup> /sec	0.33" WG 82 PA
16" x 25" 406 mm x 635 mm	1111 CFM 0.52 m <sup>3</sup> /sec	0.24" WG 60 PA	1389 CFM 0.65 m <sup>3</sup> /sec	0.33" WG 82 PA
20" x 20" 508 mm x 508 mm	1111 CFM 0.52 m <sup>3</sup> /sec	0.24" WG 60 PA	1389 CFM 0.65 m <sup>3</sup> /sec	0.33" WG 82 PA
20" x 25" 508 mm x 635 mm	1389 CFM 0.65 m <sup>3</sup> /sec	0.24" WG 60 PA	1736 CFM 0.82 m <sup>3</sup> /sec	0.33" WG 82 PA
24" x 24" 610 mm x 610 mm	1600 CFM 0.75 m <sup>3</sup> /sec	0.24" WG 60 PA	2000 CFM 0.94 m <sup>3</sup> /sec	0.33" WG 82 PA

## Particle Size Removal Efficiency



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.

Tri-Dim® and Tri-Dek® are Registered Trademarks of Tri-Dim Filter Corporation.



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