



Tri-Pleat™ Green  
LEED-Compliant  
Pleated Air Filters

# Tri-Pleat Green MERV 13 Pleated Filters



The need for MERV 13 efficiency has been brought about by the requirements in the LEED® (Leadership in Energy and Environmental Design) Certification.

LEED Credits for Indoor Environmental Quality can be difficult for existing buildings to achieve since MERV 13 (or greater) is specified as the minimum efficiency to receive credit (see the section below right for details). Traditionally, MERV 13 filters have been box or bag filters from 12" to 36" deep. While most HVAC systems in existing buildings are only designed to handle two or four inch deep prefilters.

Along with the size issue traditional MERV 13 filters have significantly higher—three or four times greater—resistance to air flow than commonly used prefilters. Additionally, upgrading to traditional MERV 13 filters can sabotage a filter budget.

Again, Tri-Dim offers the innovative solution. The Tri-Pleat Green was specifically designed to meet and exceed LEED requirements and ease the transition from commonly used prefilters to a filter that exceeds MERV 13.

Tri-Pleat Green achieves MERV 13 in a full ASHRAE 52.2 test, which meets the LEED requirements. This filter was specifically designed for an easy retrofit into conventional one, two and four inch HVAC filter tracks and holding frames. It also operates at comparable air flow and resistance as commonly used prefilters that they will replace. This allows for a seamless and inexpensive retrofit, making the Tri-Pleat Green a simple and moderately-priced alternative to conventional MERV13 filters.

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## **LEED - Indoor Environmental Quality - IEQ Credit 1.4: IAQ Best Management Practices: Reduce Particulates in Air Distribution**

Have in place filtration media with a minimum efficiency reporting value (MERV) greater than or equal to 13 for all outside air intakes and inside air recirculation returns during the performance period. Establish and follow a regular schedule for maintenance and replacement of these filters according to the manufacturer's recommended interval.

# Tri-Pleat Green LEED-Compliant Filters



## **MEDIA & EFFICIENCY**

The Tri-Pleat Green pleated filter was engineered to offer MERV 13 efficiency per ASHRAE 52.2 Test Standard. MERV 13 efficiency is defined by ASHRAE as a minimum efficiency of 90% or greater on particles 1 micron in size and larger, and 75% or greater minimum efficiency on 0.3 to 1.0 micron particles. Tri-Pleat Green meets or exceeds these requirements with ease.

The Tri-Pleat Green is constructed utilizing synthetic media that is specially designed to combine high efficiency and low resistance to air flow.

## **ENERGY SAVINGS & LEED**

The Tri-Pleat Green features a low resistance to air flow, especially when compared to conventional MERV 13 filters. Energy calculations show that the energy usage reduction is greater than 30%, which can help with LEED Certification and other green initiatives.

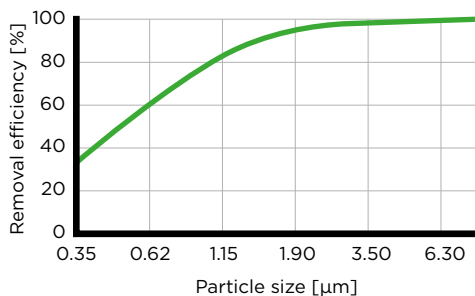
In addition to the energy savings and MERV 13 efficiency, the Tri-Pleat Green can help reduce landfill waste too. This is thanks to Tri-Pleat Green's smaller physical size compared to conventional MERV 13 filters.

# Tri-Pleat Green Technical Data

## SPECIFICATIONS

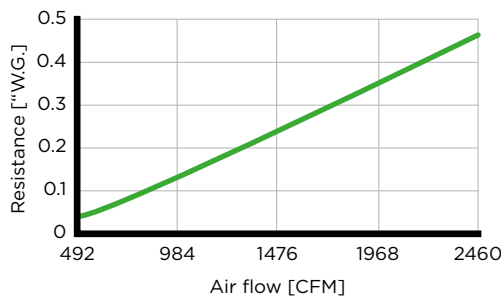
|  |                                  |
|--|----------------------------------|
| <b>Product</b>   | <b>Tr-Pleat Green</b>            |
| <b>Media</b>   | 100% synthetic                   |
| <b>Frame</b>   | Die cut                          |
| <b>Efficiency</b>  | MERV 13                          |
| <b>Initial resistance @ 500 FPM (2.54 m/s)</b>             |                                  |
| 1" (25 mm) deep  | 0.50 "W.G. (125 Pa)              |
| 2" (51 mm) deep  | 0.35 "W.G. (87 Pa)               |
| 4" (102 mm) deep   | 0.32 "W.G. (80 Pa)               |
| <b>Final resistance</b>                                    | 1.0 "W.G. (249 Pa)               |
| <b>Approximate media area</b> per square feet of face area |                                  |
| 1" (25 mm) deep  | 2.3 sq ft (0.21 m <sup>2</sup> ) |
| 2" (51 mm) deep  | 5.3 sq ft (0.49 m <sup>2</sup> ) |
| 4" (102 mm) deep   | 7.2 sq ft (0.67 m <sup>2</sup> ) |

## COMPOSITE MINIMUM EFFICIENCY



## INITIAL RESISTANCE

24 x 24 x 2" filter



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