## **E1 SERIES** ELECTROSTATIC FILTER

FILTERS AIRBORNE PARTICULATE



THERE COMPANY

## AVAILABLE IN ONE ALLOY

**E1S** SUPREME GRADE ~ Mill-Finish Aluminum

Application: The E1 Series Washable MERV 8 Electrostatic Filter is a pleated permanent washable filter designed to replace disposable air filters commonly used in residential, commercial and industrial HVAC applications to remove airborne particulate from the airstream. It uses a "passive electrostatic" media that is pleated to increase surface area which increases this filter's initial efficiency to MERV 8. A polypropylene media generates an electrostatic charge as air passes through it, and airborne pollutants such as dust, pollen, mold, bacteria and lint particles are held in place until washed away. Corner drain holes prevent water and detergent from pooling when cleaning and, therefore, facilitate faster drying time. The E1 Series is an ideal permanent filter solution for home heating, cooling and ventilation systems.

**Construction:** The E1 Series uses a mill-finished aluminum frame to enclose an electrostatic media pack. The patented media pack design places two layers of polypropylene mesh around one layer of air-laid polyester media, and these layers are surrounded by two layers of expanded metal. The pack is then corrugated which increases the material surface area thereby allowing greater dust holding capacity and efficiency at an exceptional pressure drop. The height of the pack is made to fit firmly inside the frame giving the filter exceptional strength and durability. The frame is made with mitered corners and is secured with pop-rivet(s). The frame has drain holes in three corners.

#### Filter Cleaning and Coating

- 1. The E1 Series should be cleaned every 30 days, or as often as necessary to maximize effectiveness. As with any filter, as dust loads its efficiency increase but so does air resistance, so a consistently maintained filter will last longer and cost less overtime.
- 2. To clean a dirty filter, rinse it with a moderate-to-heavy stream of warm water in the opposite direction of the airflow. Presoaking the filter in a solution of warm water and mild detergent prior to rinsing is acceptable. High-powered steam cleaning or chemical dips are unnecessary and not recommended.

Due to continuing research and development, we reserve the right to make modifications to any product.

### **PRODUCT HIGHLIGHTS**

- MERV 8 Initial Efficiency
- Washable and Reusable
- Patented Pleated Media Pack uses Static Electricity
- Low Pressure Drop
- Corner Drain Holes

## FAST FACTS

MINIMUM ORDER: No Minimum Order

#### **SIZING OPTIONS:**

Standard and Special Sizes Available (*See reverse side for details.*)

#### CLASSIFICATION:

UL Classified 900

MAX TEMP: 150 Degrees F

# **E1 SERIES** ~ Filter Selection Chart

MODEL	E1 Supreme		
CONSTRUCTION			
Frame Alloy	.030" mill-finish aluminum		
Frame Thickness	1/2" exact; nominal* 1" and 2"		
Electrostatic Media	Polypropylene		
Filter Core	Air-laid polyesther		
Support Grid	Expanded aluminum		
APPLICATION			
Max Temp.	150 Degrees F		
STANDARD SIZES			
Nominal* Dimensions (H x W x T)	Part Number	Carton Quantity	Carton Weight
12 x 24 x 1	E1S101224	12	13.0
16 x 20 x 1	E1S101620	12	14.0
16 x 25 x 1	E1S101625	12	16.0
20 x 20 x 1	E1S102020	12	16.0
20 x 25 x 1	E1S102025	12	19.0
24 x 24 x 1	E1S102424	12	21.0
12 x 24 x 2	E1S201224	12	16.0
16 x 20 x 2	E1S201620	6	9.0
16 x 25 x 2	E1S201625	6	10.0
20 x 20 x 2	E1S202020	6	10.0
20 x 25 x 2	E1S202025	6	12.0
24 x 24 x 2	E1S202424	6	13.0
E1 SERIES NOTES			

#### SIZING INFORMATION

- \* What does Nominal mean? Standard size filters are of a nominal dimension. This means the height and width dimensions are undercut by a certain amount. See below for the exact amount of undercut for each dimension.
- \*\* Filter Thickness: ½" is exact, nominal 1" (actual 7/8") and nominal 2" (actual 1-3/4").
- 1. Standard nominal filters are  $\ensuremath{\mathscr{V}}''$  undercut on the height and width dimensions.
- 2. Special size filters are made to the exact height and width dimensions provided.
- 3. Standard and Special size filters are available in depths of 1/2" exact,
- nominal 1" (7/8" actual) and nominal 2" (Actual 1-3/4").
- 4. Tolerance height and width:  $\pm$  1/8"
- 5. Tolerance thickness:  $\pm 1/32''$

#### **CLASSIFICATION AND TEST NOTES**b

- 1. UL Classified 900
- 2. Rated Airflow: 300 fpm
- 3. Acceptable Airflow Range: 250 350 fpm.
- 4. Initial Efficiency: MERV 8 at rated airflow
- 5. Dust Holding Capacity: 8.75 grams per square foot of face area (HxW)
- 6. Average Arrestance: 87.5% at rated air flow
- 7. Recommended final resistance is 1.00" W.G.
- 8. Independent test report available for performance details

#### INSTALLATION CONSIDERATIONS

- 1. The E1 Series filter may be installed in HVAC systems vertically or horizontally.
- ADDITIONAL INFORMATION
- 1. The  $\frac{1}{2}$  exact filter uses an .025" thick aluminum frame.
- 2. The  $\frac{1}{2}$  " exact filter is 5-ply and contains  $\frac{1}{4}$  " thick core.
- 3. The nominal 1" (actual 7/8") filter is 5-ply and contains  $\frac{1}{2}$  " thick core.
- 4. The nominal 2" (actual 1/-3/4") filter is 7-ply and contains 1-1/2" thick core.

