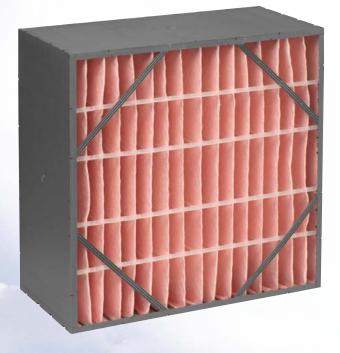
## Performance Engineered Air Filter Products Columbus Industries, Inc.

## Cl **Pcrma-Ccll**<sup>™</sup> Rigid Box Filters MERV 13 & 15



CI **Perma-Cell**<sup>The</sup> Rigid Box Filters are engineered with superior performance criteria in all facets of filtration including efficiency, resistance, and dust-holding capacity to address today's challenging HVAC system requirements. As a part of the most advanced and innovative line of HVAC filtration products, the Cl Perma-Cell\* Rigid Box Filter combines an excellent initial and lifecycle resistance with a high dust-holding capacity. This combination provides optimum filter performance — creating the energy and operating cost savings desired in the demanding HVAC market. The CI Perma-Cell<sup>™</sup> Rigid Box Filter is backed by the outstanding customer service and on-time delivery that customers have come to expect from Columbus Industries.

## **Description and Benefits**

Cl **Perma-Cell**<sup>¬</sup> Rigid Box Filters are high-efficiency air filters designed to handle virtually any HVAC application, including high-moisture or variable air-volume systems. Each filter utilizes a technologically advanced media that incorporates a dual-layer, gradient-density fiber structure that results in exceptionally low airflow resistance, at the highest efficiency levels – reducing both energy and operating costs.

These high-performance filters will improve indoor air quality and remove contaminants from HVAC environments. The Cl Perma-Cell<sup>¬</sup> Rigid Box Filter is engineered to protect both expensive HVAC equipment and workers from dirty air and its damaging effects. The user-friendly filter is also lightweight, durable and easy to install.

Cl **Perma-Cell**<sup>--</sup> Rigid Box Filter has a uniquely engineered media that is bonded to an expanded metal backing. The media is then formed into a pleat pack that is supported with contoured plastic pleat separators. The pleat pack is then sealed to an plastic frame, utilizing plastic corner straps to provide structural integrity. A cross strap support system is then applied, adding to the filter's integrity and durability. Each stage of our assembly process is quality controlled to ensure the performance, consistency and durability of each filter. These design and construction features combine to produce the best all-around performance in airflow, efficiency and dust-loading uniformity.

Looking for LEED certification? The Cl Perma-Cell\* Rigid Box Filters are the perfect solution if you want to specify or upgrade your current filtration to meet LEED certification requirements. With these high-performance filters, your facility can gain points toward LEED certification – without incurring large operating cost increases. The Cl Perma-Cell\* Rigid Box Filter meets efficiency standards outlined in the LEED program for new construction and existing buildings.

### **Quick Facts**

#### Features:

- Provides lower initial resistance
- Provides lower energy consumption
- Provides lower operating cost
- Meets requirements for LEED certification
- Provides a rigid filter for variable air systems

#### Applications:

- Commercial and industrial facilities
- Pharmaceutical
- Government and educational facilities
- Hospitals
- Paint booth/finishing

#### Technical:

- Available in a variety of standard sizes
- Available in MERV 13 and 15
- Tested in accordance with ASHRAE Test Standard 52.2-2007
- UL Standard 900 tested and approved
- Temperature rated up to 160°F

# Cl Perma-Cell<sup>™</sup> Rigid Box Filters

MERV 13	Filter Size Nominal	Filter Size Exact	Rated Air Flow Capacity (CFM)			Initial Air Flow Resistance (in w.g.)			Media Area	
			Low	Med	High	Low	Med	High	Std	Hdr
	12x24x12	11-3/8x23-3/8x11-1/2	600	1000	1250	0.16	0.35	0.55	32.0	25.0
	20x20x12	19-3/8x19-3/8x11-1/2	830	1390	1740	0.16	0.35	0.55	41.0	38.0
	20x24x12	19-3/8x23-3/8x11-1/2	1000	1670	2080	0.16	0.35	0.55	49.0	46.0
	24x24x12	23-3/8x23-3/8x11-1/2	1200	2000	2500	0.16	0.35	0.55	60.0	53.0
/ 15	12x24x12	11-3/8x23-3/8x11-1/2	600	1000	1250	0.17	0.36	0.50	32.0	25.0
	20x20x12	19-3/8x19-3/8x11-1/2	830	1390	1740	0.17	0.36	0.50	41.0	38.0

MERV 15

20x24x12

24x24x12

19-3/8x23-3/8x11-1/2

23-3/8x23-3/8x11-1/2

 2500
 0.17
 0.36
 0.50
 60.0
 53.0

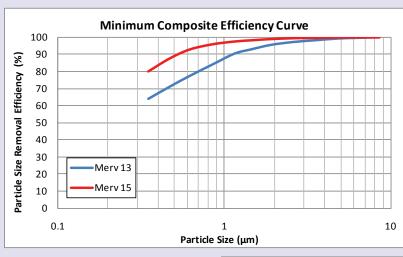
 \*Header models will have an increase in initial resistance of 0.03

0.50

49.0

46.0

0.36



1000

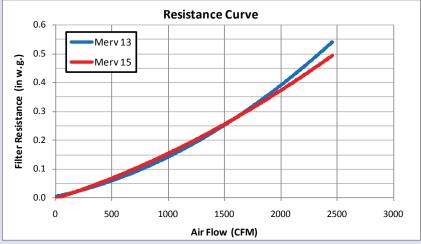
1200

1670

2000

2080

0.17



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