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

## **CI 4" MICRO SHIELD®** Mini-Pleated Filters MERV 12, 14/14A & 15



## **Description and Benefits**

CI 4" **MICRO SHIELD**<sup>®</sup> MP Filters are an economical choice for extended surface, high-efficiency air filtration requirements. 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 CI 4" **MICRO SHIELD**<sup>®</sup> MP Filter is engineered to protect both expensive HVAC equipment and people from dirty air and its damaging effects. The user-friendly filter is also fully incinerable, lightweight, durable and easy to install.

The self-supported 4" **MICRO SHIELD**<sup>®</sup> MP Filter utilizes a geometrically formed pleat pack. Each pleat pack is further strengthened with rigid, mechanical pleat separators. The pack is then sealed into an all-plastic frame. Each stage of the assembly process is quality controlled to ensure the filter's performance, consistency and durability. 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 4" **MICRO SHIELD**<sup>®</sup> MP 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 4" **MICRO SHIELD**<sup>®</sup> Mini-Pleated Filter meets efficiency standards outlined in the LEED program for new construction and existing buildings.



## **Best in Class!**

*Cl 4*" **MICRO SHIELD**<sup>®</sup> *Mini-Pleated 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 CI 4" MICRO SHIELD® MP 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 4" MICRO SHIELD® MP Filter is backed by the outstanding customer service and on-time delivery that customers have come to expect from Columbus Industries.

The Cl 4" MICRO SHIELD® Mini-Pleated Filter replaces a wide range of Rigid Box, 2V and other 4" Mini-Pleat products.

### **Quick Facts**

#### Features:

- Provides lower initial resistance
- Provides lower energy consumption and operating cost
- Meets requirements for LEED certification
- Provides an economical and high efficiency upgrade for most applications
- Easy installation

#### **Applications:**

- Commercial and industrial facilities
- Government and educational facilities
- Paint booth/finishing
- Hospitals, research labs and pharmaceuticals
- Airports
- Electrical manufacturing
- Power generators

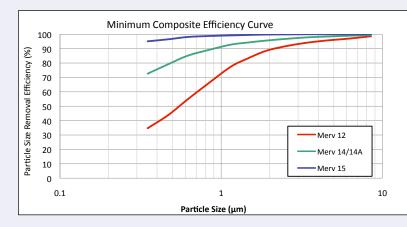
#### **Technical Information:**

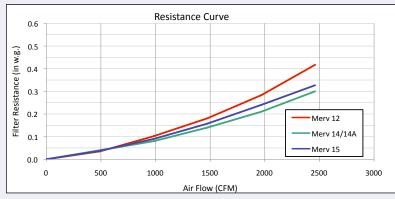
- Available in variety of standard sizes
- Available in MERV 12, 14/14A and 15
- Tested in accordance with ASHRAE Test Standard 52.2-2007
- MERV 14/14A model tested in accordance with ASHRAE Test Standard 52.2-2007 Appendix J conditioning step
- UL Standard 900 tested and approved
- Temperature rated up to 160°F
- Fully incinerable
- Available with or without gasket
- Header and non-header versions available in a variety of sizes

# **CI 4" MICRO SHIELD® Mini-Pleated Filters**

	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
MERV 12	12 X 24 X 4	11-3/8 X 23-3/8 X 3-3/4	600	1000	1250	0.14	0.28	0.43	33	30
	20 X 20 X 4	19-3/8 X 19-3/8 X 3-3/4	830	1390	1740	0.14	0.28	0.43	47	44
	20 X 24 X 4	19-3/8 X 23-3/8 X 3-3/4	1000	1670	2080	0.14	0.28	0.43	57	52
	24 X 24 X 4	23-3/8 X 23-3/8 X 3-3/4	1200	2000	2500	0.14	0.28	0.43	69	65
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MERV 14/14A	12 X 24 X 4	11-3/8 X 23-3/8 X 3-3/4	600	1000	1250	0.11	0.21	0.30	33	30
	20 X 20 X 4	19-3/8 X 19-3/8 X 3-3/4	830	1390	1740	0.11	0.21	0.30	47	44
	20 X 24 X 4	19-9/3 X 23-3/8 X 3-3/4	1000	1670	2080	0.11	0.21	0.30	57	52
	24 X 24 X 4	23-3/8 X 23-3/8 X 3-3/4	1200	2000	2500	0.11	0.21	0.30	69	65
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MERV 15	12 X 24 X 4	11-3/8 X 23-3/8 X 3-3/4	600	1000	1250	0.12	0.24	0.33	33	30
	20 X 20 X 4	19-3/8 X 19-3/8 X 3-3/4	830	1390	1740	0.12	0.24	0.33	47	44
	20 X 24 X 4	19-9/3 X 23-3/8 X 3-3/4	1000	1670	2080	0.12	0.24	0.33	57	52
	24 X 24 X 4	23-3/8 X 23-3/8 X 3-3/4	1200	2000	2500	0.12	0.24	0.33	69	65

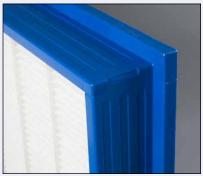
\*Also available in 16 X 20, 16 X 25, and 20 X 25 sizes





Newly designed stronger frames are available with or without gaskets.

Header version



Non-header version





2938 State Route 752 • P.O.Box 257 • Ashville, Ohio 43103-0257 Phone: 740.983.2552 • Fax: 740.983.4622 www.colind.com • E-mail: ci@colind.com