

MICRO SHIELD® ZERO-BYPASS™

4V-Cell Mini-Pleat Filters



MICRO SHIELD® 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 our advanced and innovative line of HVAC filtration products, **MICRO SHIELD®** filters combine 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 Performance Engineered **MICRO SHIELD®** Mini Pleat Filters Just Got Better!

Our latest innovation -- **ZERO-BYPASS™** -- combines our Best In Class mini-pleated media with patented gasket technology originally developed by 3M.

This innovative combination creates a long-lasting, low pressure drop filtration system that virtually eliminates filter bypass with the inclusion of the **ZERO-BYPASS™** permanent gasket system.

Available in MERV 16/16A and 16/15A these exceptional filters offer unparalleled filtration performance while providing energy, time, and labor savings.

ZERO-BYPASS™ Gasket Technology



Quick Facts

Features:

- Patented, permanent gasket system
- Positive mechanical seal eliminates air bypass
- Superior energy savings compared to other high-efficiency products
- Low initial resistance
- Lightweight
- Hassle free installation without additional filter hardware
- Fully incinerable

Applications:



- Commercial Buildings
- Industrial Facilities
- Pharmaceutical
- Government Institutions
- Universities/Schools
- Hotels and Entertainment Complexes



Technical Information:

- MERV 16/16A
 $\Delta P = .33'' \text{w.g. at } 1968 \text{ cfm}$
- MERV 16/15A
 $\Delta P = .20'' \text{w.g. at } 1968 \text{ cfm}$

- Available in a variety of standard sizes
- Tested in accordance with ASHRAE Test Standard 52.2-2017 appendix J
- UL Standard 900 approved
- 100% synthetic media

MICRO SHIELD® ZERO-BYPASS™ 4V-Cell Mini-Pleat Filters

	Filter Size (Nominal)	Rated Air Flow Capacity (CFM)			Initial Air Flow Resistance (w.g.)	Media Area (sqft)
		Low	Med	High		
	12 x 24 x 12	722	963	1204	0.33	52
	20 x 24 x 12	1236	1648	2060	0.33	89
	24 x 24 x 12	1500	2000	2500	0.33	108
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	24 x 24 x 12	1500	2000	2500	0.20	108

MICRO SHIELD ZERO-BYPASS Energy Savings Calculator				
			Competitive Alternatives	
Media	Synthetic	Synthetic	Synthetic	Glass ₁
MERV Rating	16/16A	16/15A	16	16
Test Period	12 Months	12 Months	12 Months	12 Months
Initial Resistance (@500 FPM)	0.33" w.g.	0.20" w.g.	.31" w.g.	0.6" w.g.
Average Resistance	0.44" w.g.	0.27" w.g.	.41" w.g.	0.8" w.g.
Final Resistance	0.66" w.g.	0.40" w.g.	.62" w.g.	1.2" w.g.
Energy Cost	\$111.00	\$67.00	\$94.00	\$182.00
Additional Energy Cost	-	-		