



# Hi-Flo<sup>®</sup> ES

The Only Filter of its Kind  
Designed to Work Without a Prefilter



## What's New? *EVERYTHING*

- 27-50% Less HVAC Energy Use than Competitive Filters
- 25-50% Longer Life, Compared to Competitive Rigid Filters

CLEAN AIR SOLUTIONS



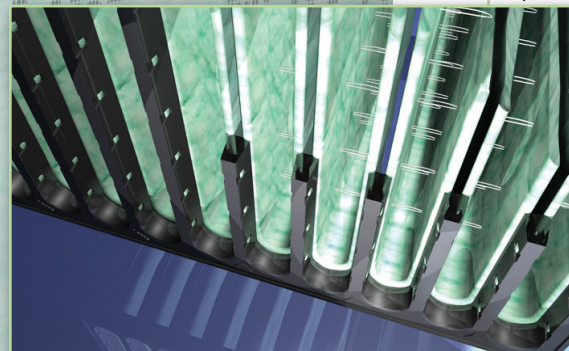
**Hi-Flo ES is a high-efficiency ASHRAE grade pocket filter** that delivers longest service life, and lowest energy use. It is ideal for the removal of a broad range of contaminants. Hi-Flo ES has a unique pocket configuration, and special media that is proprietary to Camfil. As a result, unlike all other final filters, the Hi-Flo ES does not require a prefilter. This produces significant savings in filter, labor and disposal costs.

### Hi-Flo ES MEDIA PROVIDES SUPERIOR CAPTURE PERFORMANCE

Hi-Flo ES uses exclusive Camfil high loft, air laid micro fiber glass media that assures optimal performance throughout the filter's life. Small fiber diameter and uniform lofting provides uniform capture of submicron particles and low resistance to airflow.

**Its superior performance is unaffected by dust loading or humidity.**

A synthetic micromesh media backing protects the media from turbulent or variable airflows.



### TAPERED POCKET STITCHING

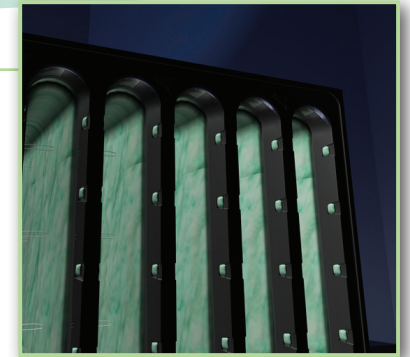
Camfil is the only manufacturer that uses tapered pocket stitching to prevent pocket contact throughout the filter's depth. This ensures uniform airflow and full use of the media. Controlled media spacing gives the Hi-Flo ES lower pressure drop and longer life. In addition, a front-to-back side taper makes the filter extremely resilient, and not vulnerable to tearing or other damage during installation in a side access housing.

**The end result: longer filter life and lowest life cycle cost.**



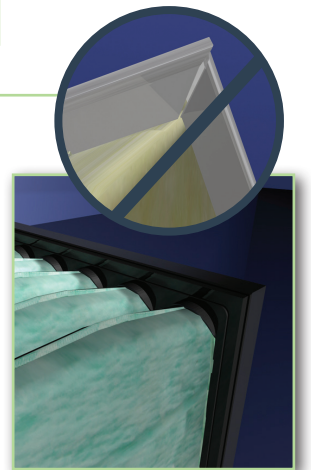
### PLASTIC HEADER FOR PERFORMANCE AND SUSTAINABILITY

The high-impact ABS header frame is assembled from matching halves, providing both flexible performance and sustainability. The Hi-Flo ES frame is both recyclable and incinerable.



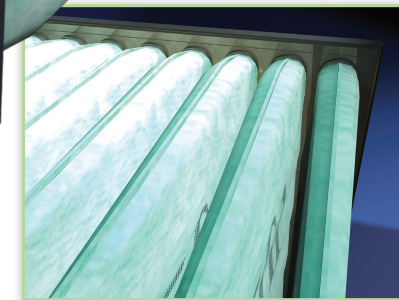
### MOLDED FRAME PROVIDES SAFETY, SECURITY AND CONVENIENCE

Snap-together molded frame eliminates corner joints. No rivets, jagged edges or sharp corners. Safer and easier to install and remove, protecting service personnel. Pocket damage is also prevented. Unique snap-to-seal pocket retainer that is integral to the header design prevents bypass between pockets.



### POCKET SEPARATION OPTIMIZES PERFORMANCE

The exit side of the air tunnels includes a pocket flange to ensure pocket integrity throughout the filter's life. A down-stream pocket-to-pocket partition provides additional separation to assure full flow through the media.



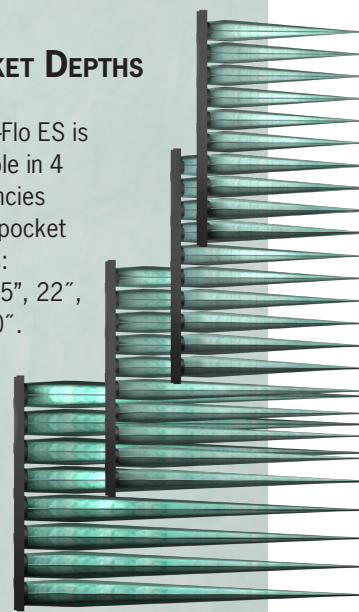
### FILTER CHANGE IS EASY, CONVENIENT, AND REDUCES WASTE

The Hi-Flo ES shipping container has a transport handle, so service personnel can conveniently transport filters and discard the used filters in the same container. The Hi-Flo ES filter offers streamlined disposal, too. 3-4 used Hi-Flo ES filters fit in the same space as one rigid filter. **This equates to a 70% reduction in disposal cost.**



### POCKET DEPTHS

The Hi-Flo ES is available in 4 efficiencies and 4 pocket depths: 12", 15", 22", and 30".



### 5-Star ECI Rating

The **Hi-Flo ES** has earned five stars through the Energy Cost Index (ECI) program. Based on a five-star scale, the ECI is an indicator of what a filter will cost over its service life. Earning the top rating indicates that a filter is the most energy-efficient, longest-lasting filter available.

## The Hi-Flo<sup>®</sup> ES vs. the Competition

Filter	Hi-Flo ES 24x24x22 10 Pkt MERV 14 (No Prefilter)	4V Average (with AP III Prefilter)	2V Average (with AP III Prefilter)	Rigid Box Aluminum Separate Average (with AP III Prefilter)	Rigid Box Deep Pleat (with AP III Prefilter)	4" Minipleat Average (with AP III Prefilter)	Bag Filter Average (with AP III Prefilter)
Final Filter Life (in Months) <sup>1</sup>	18	24	12	12	12	12	12
Annual Energy Consumption <sup>2,3</sup>	\$148.67	\$236.17	\$241.92	\$252.78	\$274.00	\$303.94	\$244.57
Annual Environmental Impact per Filter	\$0.42	\$2.23	\$3.16	\$3.16	\$3.16	\$1.90	\$1.90
Prefilter/Labor Cost	\$0.00	\$48.00	\$48.00	\$48.00	\$48.00	\$48.00	\$48.00
Initial Pressure <sup>2,4</sup>	0.37	0.45	0.52	0.66	0.82	0.63	0.66
Performance Guarantee <sup>3</sup>	Yes	No	No	No	No	No	No
Prefilter Required	No	Yes	Yes	Yes	Yes	Yes	Yes
Incinerable	Yes	Some	Some	No	No	Some	No

**Note 1:** Filter in months based on standard change-out frequencies.

**Note 2:** Based on average of multiple competitor filters run on LCC.

**Note 3:** Higher energy usage is primarily a factor of the prefilter attaining maximum pressure every 3 months. The Hi-Flo ES is designed to operate without pre-filtration.

**Note 4:** Pressure Drop and LCC information contained is based upon 400 fpm (feet per minute) approach velocity which better reflects current industry practice.

## The Hi-Flo ES Benefits Users from the First Day of Installation, with:

**THE LOWEST HVAC ENERGY COSTS.** Energy cost per filter can be as high as four times the cost of the filter annually. The Hi-Flo ES has a low maintained pressure drop that saves 30% of electric utility costs, compared to other filters.

**FEWER FILTER CHANGES** than other high efficiency filters. Savings include lower labor costs, decreased disposal, less landfill waste and lower carbon footprint.

**MISTAKE-FREE IDENTIFICATION.** Alternate pockets are marked with MERV and MERV-Ratings for easiest identification.

**AVAILABLE IN 4 EFFICIENCIES:** MERV 11, MERV 13, MERV 14 and MERV 15 as evaluated per ASHRAE standard 52.2.

**ALL 4 EFFICIENCIES MEET APPENDIX J STANDARDS.** MERV - 11A, MERV -13A, MERV-A14A, MERV-15A. The Appendix J rating assures that the Hi-Flo ES will provide maintained particle capture efficiency throughout its service life. The Hi-Flo ES has respective efficiencies of ePM10-70, ePM1-60, ePM1-70, and ePM1-80 when evaluated per ISO filter testing standard 16890.

**HEADER AVAILABLE IN 4 SIZES.** 24x24 (10 pockets), 24x12 (5 pockets), 24x20 (8 pocket), 20x20 (8 pockets), 20x24 (10 pocket), 12x24 (10 pocket).

**A 5-STAR ECI RATING** that ensures maintained efficiency and longer life than traditional high efficiency filters. The many "green" features of the Hi-Flo ES (including longer-lasting media and incinerable/recyclable frames) help building owners meet environmental and "sustainability" commitments. *And to do so at the lowest cost of ownership.*

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