



Durafil[®] ES²

High Performance, Best in Class, V-Bank Filter for Reducing Total Energy Consumption



Radically Different...AGAIN!

CLEAN AIR SOLUTIONS

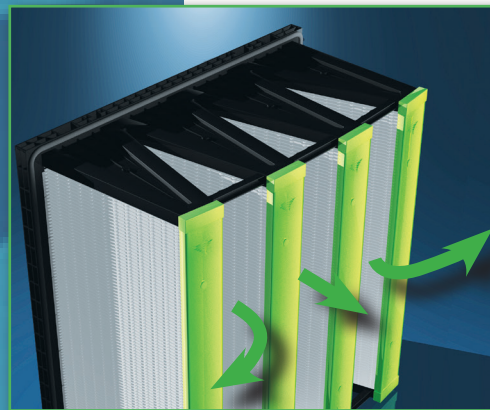


Outperforms All Others

The new improved Durafil ES² (Energy Saver) is an “energy-optimized” filter that has been taken to the next level. The Durafil ES² reduces the cost of ownership over competitive 4V products by more than 40%, which equates to over \$160 annual savings on typical installations. Camfil understands that over 80% of the cost for air filtration is in the electric energy; the force of the fan to move the air through the filter and the system. Camfil has designed the Durafil ES² to have an optimum contaminants loading curve, low initial and maintained resistance to air flow, while ensuring maintained efficiency protecting building occupants and processes from contaminants. The new Durafil ES² takes high performance to a new level of power. We guarantee it.

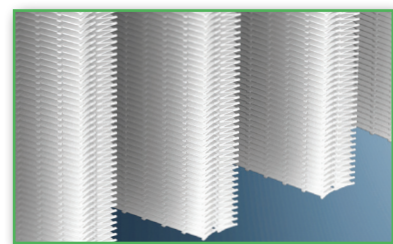


Single Header Version

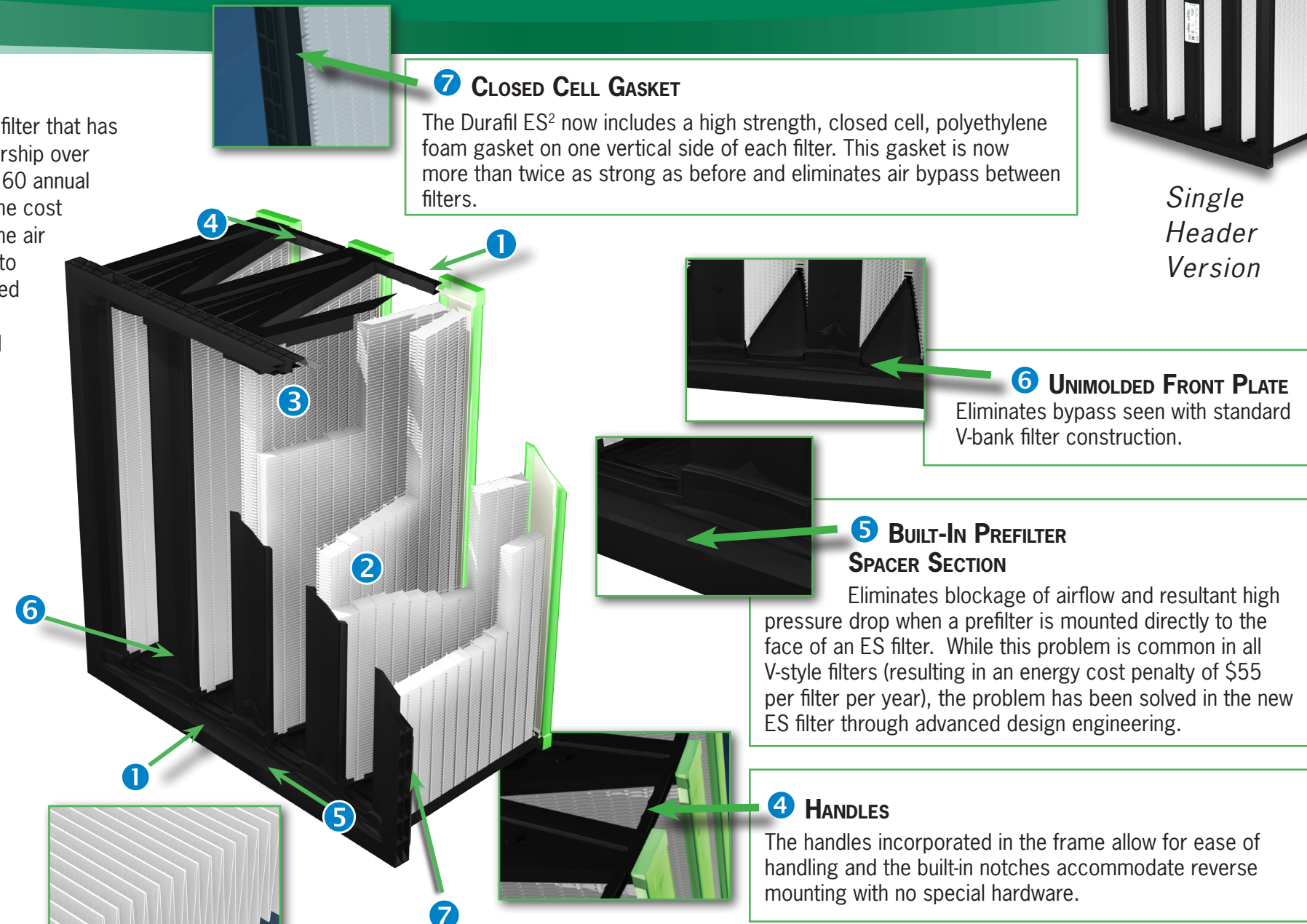


1 RADIAL INLET & OUTLET
The unique curved form of the air inlet and outlet provides greater open area than any other V-shaped filter, resulting in a much lower pressure drop profile.

30% more open area on the filter inlet and 60% more open area on the outlet than traditional V-style filters – a key component of lowest pressure drop in the industry.



2 MEDIA PACKS
The media packs utilize a newly developed height-to-pleat spacing ratio that works in conjunction with the radial inlet and outlet to minimize pressure drop. The pleat separators ensure pleat stability to provide continual low energy usage performance.



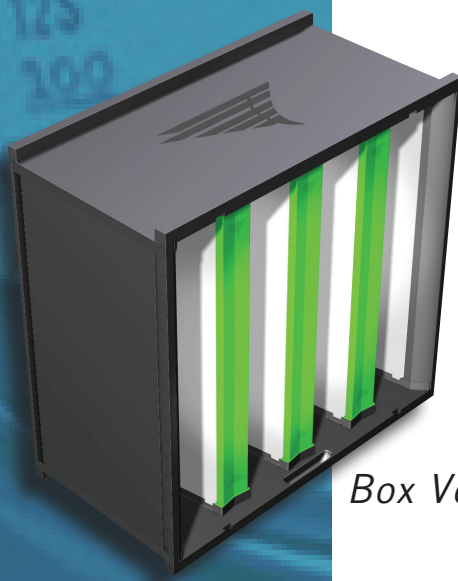
7 CLOSED CELL GASKET
The Durafil ES² now includes a high strength, closed cell, polyethylene foam gasket on one vertical side of each filter. This gasket is now more than twice as strong as before and eliminates air bypass between filters.

6 UNIMOLDED FRONT PLATE
Eliminates bypass seen with standard V-bank filter construction.

5 BUILT-IN PREFILTER SPACER SECTION
Eliminates blockage of airflow and resultant high pressure drop when a prefilter is mounted directly to the face of an ES filter. While this problem is common in all V-style filters (resulting in an energy cost penalty of \$55 per filter per year), the problem has been solved in the new ES filter through advanced design engineering.

4 HANDLES
The handles incorporated in the frame allow for ease of handling and the built-in notches accommodate reverse mounting with no special hardware.

3 NEW IMPROVED ES² MEDIA
The new Durafil ES² Media is designed with a fiber structure that maximizes filter life and energy savings. Camfil has decreased the average resistance of the Durafil ES² media by 20%.¹ The Durafil ES² maintains its rated efficiency for its entire life cycle, unlike electrostatically charged synthetic medias.



Box Version

5-Star ECI Rating

The Durafil ES² is rated as a 5-Star filter through the Energy Cost Index (ECI) program. Based upon a five-star scale, the Energy Cost Index is an indicator of what a filter will cost over its lifetime. The best rating – five stars – indicates that the filter is the most energy-efficient, longest lasting filter available.



1 - Calculations based upon full size MERV 14 product. Contact your local distributor for savings calculations on other efficiencies.

ES² vs. Competitors' Comfort Air Final Filters

How the ES² Compares

	Durafil ES ²	Former Model Durafil ES	Hi-Flo ES 22"	Next Best V-Bank (4V)	V-Bank (2V)	Aluminum Separator Box	8-Pocket Bag	Rigid Media Box	4" Minipleat
Filter Life (months)	24	24	18	24	12	12	12	12	4
2-Year Energy Cost	\$272	\$348	\$353	\$461	\$555	\$666	\$605	\$761	\$780
Number of Filters Required	1	1	1.5	1	2	2	2	2	6
Additional Energy Cost	\$0	\$76	\$81	\$189	\$283	\$394	\$333	\$489	\$508
Average dP over Filter Life	0.37	0.47	0.48	0.63	0.76	0.91	0.93	1.04	1.06
Difference in Average Pressure Drop	Base value	0.10	0.11	0.26	0.39	0.54	0.56	0.67	0.69
Percent (%) Energy Savings Using Durafil ES ²	Base value	21.8%	22.9%	41.0%	51%	59.2%	55%	64.3%	65.1%

Parameters: MERV 14 Durafil ES², single stage of filtration, 8760 hours per year, 1600 cfm airflow, return air 70%, 45% fan efficiency, 10¢ per kWh
 The above information does not include local cost parameters such as energy demand and distribution charges from local utilities.

The GREENest Final Filter Available

ENERGY SAVING. The Durafil ES² is a 5-Star energy rated product and uses up to 40% less energy than any other filter in its class. Refer to the above chart for possible energy savings for your system(s) based on the type(s) of products you are currently using.

AIR QUALITY. The new Durafil uses a special ES² micro fiber media designed to save energy and provide the highest particle contaminant removal efficiency available. The media maintains its efficiency the entire time in the air handling unit to ensure clean high quality air in the facility.

WASTE REDUCTION. Under normal conditions, the filter life exceeds two years or twice as long as a competitor's traditional rigid box filter or bag filter. In a 48,000 cfm unit over a four-year period, this translates into 48 less filters disposed (400 lbs. of waste), 48 less cartons used, and fuel and greenhouse gases emissions reduced due to less filters in transit from factory to end user.

ENVIRONMENTAL IMPACT. A longer lasting, energy frugal filter saves users money in energy and labor, and also positively impacts the carbon footprint. Less transportation fuel is burned, fewer trees are killed for invoicing paperwork and cartons, and less greenhouse gas emissions and water waste are generated from paper and carton production.