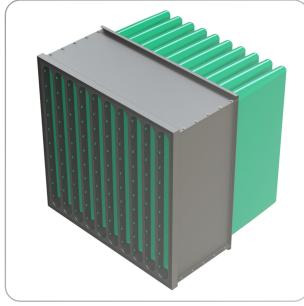


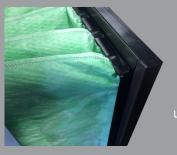
## CamExtend

Frame Extension for Built-Up Banks to Install High Performance Bag Filters in Limited Spaces



Patent Pending

Unique SnapSeal ensures that the filter seats tightly in the frame eliminating air bypass



A special magnetic gasket on the Hi-Flo® ES MG allows installation of the filter without the use of fasteners or tools. The CamExtend installs as an add-on to existing HVAC built-up filter banks, giving the end user an additional 10" of filter depth. This allows facilities to capitalize on the energy savings of deep pocket, Hi-Flo<sup>®</sup> ES filters and the associated performance guarantees of that product.

The durable 16 gauge galvanized steel CamExtend is designed to attach into any front load HVAC filter bank with an expected service life equal to or greater than the frame itself.

The CamExtend accepts specially designed Hi-Flo ES filters constructed with a full perimeter, SnapSeal magnet gasket to eliminate air bypass around the entire perimeter of the filter.

The CamExtend provides the following benefits:

- The life and energy savings of a 22" or 30" Hi-Flo ES pocket filter
- The waste and handling savings of switching from 12" deep rigid box-style filters to compact pocket filters
- No clips or fasteners required
- Reduce filter replacement time by 40%
- In suitable applications, the removal of the prefilter along with the standard Hi-Flo ES, Camfil guarantee

The CamExtend is available in 4 sizes which can be mounted in rotated configurations;  $24 \times 24$ ,  $12 \times 24$ ,  $24 \times 20$ , or  $20 \times 24$ .

The CamExtend should be ordered with Hi-Flo ES MG filters. These are specially designed Hi-Flo ES filters that mate up with the CamExtend to eliminate the need for clips and fasteners.



# CamExtend

### Frame Extension for Built-Up Banks to Install High Performance Bag Filters in Limited Spaces

Part Number <sup>1</sup>	Actual Depth (inches)	Actual Dimensions (inches)		Weight (lbs)	
		Height	Width		
Standard Built-up Bank Application					
406148-001	10-15/16	24	24	20	
406148-002		24	20	18	
406148-003		24	12	15	
406148-004		20	20	17	

Frame Sizes	Substitute frame size letter at the * from the column to the left at desired efficiency				
A = 24 x 24	22" deep Pocket Depth	30" deep Pocket Depth			
B = 24 x 20	MERV 15 406158 * 22	MERV 15 406158 * 30			
$C = 24 \times 12$	MERV 14 406159 * 22	MERV 14 406159 * 30			
$D = 20 \times 20$	MERV 13 406160 * 22	MERV 13 406160 * 30			
$E = 20 \times 24$					
$F = 12 \times 24$	MERV 11 406161 * 22	MERV 11 460161 * 30			

Data notes:

Four C-80 Fasteners required per frame, sold separately, Camfil part number 061180-000. Frames are shipped flat, and assembled in the field using only a screw driver. Assembly hardware is included.

Confirm sufficient space for installation in the air handler before ordering (10-15/16" frame depth). Frames may be rotated  $90^{\circ}$  if needed.

#### **Replacement Filter Specification (Camfil Hi-Flo ES MG)**

#### 1.0 General

**1.1** - Air filters shall be high efficiency ASHRAE extended surface pocket style filters consisting of high loft air laid micro fine glass media, a reinforced ABS plastic header, ABS plastic pocket retainers, magnetic filter to frame seal and bonding agents to prevent air bypass and ensure leak free performance.

1.2 - Sizes shall be as noted on drawings or other supporting materials.

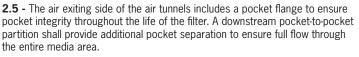
#### 2.0 Construction

**2.1** - Filter media shall consist of high-density air laid lofted micro fine glass media that is chemically bonded to a synthetic micro mesh media support backing forming a lofted filter blanket.

**2.2** - Individual pockets shall contain a minimum of 40 stitching support points per square foot of media area. All stitching centers shall be sealed through the use of a foam-based sealant that shall remain pliable throughout the life of the filter. The sides and ends of each pocket shall be sewn with a chain-link overlock stitch.

**2.3** - Pockets shall be formed into tapered pleats, supported by controlled media space stitching, to promote uniform airflow across the surface of the media. At any point, the sizes of the upstream and downstream passages shall be proportional to the volume of filtered air. The pockets shall also have a conical configuration to minimize contact with HVAC system components.

**2.4** - Support members shall include an ABS plastic header and ABS plastic pocket retainers. The header shall be joined to the media to prevent air bypass. Individual pocket retainers shall be attached to the header frame with anchor ports allowing for visual confirmation. The frame shall include an integral magnetic strip to effect a seal between the filter and the filter holding frame. Bypass between pockets shall be eliminated through a snap-to-seal pocket retainer that shall be an integral part of the two-piece header design. The frame shall form a rigid and durable support assembly.



#### 3.0 Performance

**3.1** - The filter shall have a Minimum Efficiency Reporting Value of (MERV 11, MERV 13, MERV 14, MERV 15) when evaluated in accordance with ASHRAE Standard 52.2. It shall have a MERV-A of (11, 13, 14, 15)\* when tested using Appendix J of that standard.

**3.2** - When installed in CamExtend frame Initial resistance to airflow shall not exceed (0.32", 0.40", 0.45", 0.62")\* w.g on a 22" depth 10-pocket bag or (0.32", 0.40", 0.45", 0.62")\* w.g on a 30" 8-pocket bag at an airflow of 400 fpm.

**3.2** - The manufacturer shall warranty that the filter shall be capable of withstanding 10.0" w.g. without failure of the filter.

3.3 - The filter shall be classified by Underwriters Laboratories as UL 900.

**3.4** - Manufacturer shall provide evidence of facility certification to ISO 9001:2015.

Supporting Data - Provide ASHRAE product test report per ASHRAE Standard 52.2-2017, including testing per appendix J.



For detailed specifications please consult your local Camfil Distributor or Representative or www.camfil.com. Camfil has a policy of uninterrupted research, development and product improvement. We reserve the right to change designs and specifications without notice.

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