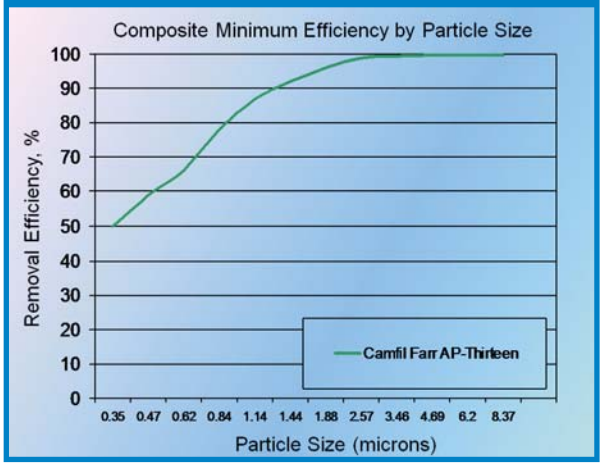
LEED LEVEL MERV 13 NEW

AP-Thirteen

High Efficiency, High Capacity, Pleated Panel Filter for Meeting LEED[1] Requirements

High efficiency filtration meeting the needs for a 2” or 4” deep MERV 13 pleated panel for LEED facility certification



The efficiency chart above is extrapolated from particle size versus efficiency information when evaluated per ASHRAE Standard 52.2.

The Camfil Farr AP-Thirteen extended surface pleated filter offers filtration for application in units that have 2” or 4” deep filter tracks for filter installation. The AP-Thirteen is a MERV 13 filter when evaluated per ASHRAE Standard 52.2 and meets the requirements for minimum filtration efficiency as published in LEED manuals for new or existing buildings. The AP-Thirteen may reduce the size of the HVAC system, saving valuable mechanical area floor space. It also allows upgrading of in-place systems, allowing existing units to meet LEED requirements without major equipment modification to meet the requirements.

Standard pleated filters remove nuisance dusts, lint and contaminants associated with staining and are primarily designed to protect equipment and act as prefilters. As a stand-alone filter, the AP-Thirteen will perform these tasks and also remove sub-micron particles, defined as lung-damaging by cognizant authorities. The AP-Thirteen, according to filtration application design manuals, may be used as the only filter for special process areas, electrical shops, paint shops, average general offices and laboratories. We can also add analytical laboratories, electronics shops, drafting areas, conference rooms, and above-average general offices to the list.

Built for today’s HVAC systems, the AP-Thirteen:

- Has 15 pleats per linear foot in a 2” nominal depth or 11 pleats per linear foot in a 4” nominal depth. The radial pleat design ensures full use of media area and a longer filter life.
- Includes a synthetic fiber blend with a unique media loft that provides high efficiency ASHRAE MERV 13 performance and high dust holding capacity.
- Has a welded wire media grid backing, treated for corrosion resistance, preventing media oscillation or filter pack failure as filter pressure drop increases.
- Has a biodegradable Kraft board frame that creates a rigid and durable filter pack. The frame is made of virgin board produced under an initiative for sustainable forest management. Virgin board has up to two times the strength of board constructed of recycled materials. The AP-Thirteen will not bow or deflect and is guaranteed to 2.0” w.g.

These combined features allow the AP-Thirteen to outlast other MERV 13 pleated panels by a factor of 20% or more resulting in the lowest total cost of ownership (TCO).

[1] LEED, Leadership in Energy and Environmental Design is a registered trademark of the United States Green Building Council.

camfil FARR

Camfil Farr	Product sheet
AP-Thirteen	1038 - 0309
Camfil Farr - clean air solutions	

Nominal Depth (inches)	Nominal Size (inches)	Part Number	Actual Size (inches)			Airflow Capacity (cfm)	Initial Resistance (inches, w.g.)	Total Media Area (square feet)	Number of Pleats
			Height	Width	Depth				
4	20 x 16	405414-004	19.38	15.38	3.75	1110	0.35	15.6	11 pleats per linear foot
	20 x 20	405414-003	19.38	19.38		1390		18.8	
	24 x 12	405414-002	23.38	11.38		1000		13.8	
	24 x 16	405414-009	23.38	15.38		1330		19.9	
	24 x 18	405414-008	23.38	17.38		1500		20.1	
	24 x 20	405414-007	23.38	19.38		1670		22.5	
	24 x 24	405414-001	23.38	23.38		2000		27.5	
	25 x 16	405414-005	24.38	15.38		1390		19.5	
	25 x 20	405414-006	24.38	19.38		1740		23.5	
2	20 x 14	405413-010	19.50	13.50	1.75	975	0.40	8.3	15 pleats per linear foot
	20 x 12	405413-014	19.50	11.50		830		7.3	
	20 x 16	405413-001	19.50	15.50		1110		9.8	
	20 x 20	405413-002	19.50	19.50		1390		11.7	
	24 x 12	405413-006	23.38	11.38		1000		8.3	
	24 x 16	405413-001	23.50	15.38		1335		13.3	
	24 x 18	405413-008	23.50	17.50		1500		12.9	
	24 x 20	405413-007	23.38	19.50		1670		14.1	
	24 x 24	405413-005	23.38	23.38		2000		17.3	
	25 x 16	405413-012	24.50	15.50		1390		12.3	
	25 x 18	405413-009	24.50	17.50		1565		13.5	
	25 x 20	405413-003	24.50	19.50		1740		14.7	
	25 x 14	405413-011	24.50	13.50		1220		10.4	
	24 x 16	405413-012	23.50	15.50		1335		11.8	
	25 x 25	405413-013	24.50	24.50		2170		19.0	

DATA NOTES:
1.0" w.g. recommended maximum final resistance. System design may dictate a lower change-out point.
The AP-Thirteen filter is classified by Underwriters Laboratories as UL Class 2. Maximum operating temperature 150° F (66° C).

1.0 General

1.1 - Air filters shall be medium efficiency ASHRAE pleated panels consisting of synthetic media, welded wire media support grid, and kraft board enclosing frame.

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

2.0 Construction

2.1 - Filter media shall be lofted moisture resistant synthetic media formed into a uniform radial pleat.

2.2 - A welded wire grid, spot welded on one-inch centers and treated for corrosion resistance shall be bonded to the downstream side of the media to maintain radial pleats and prevent media oscillation.

2.3 - A biodegradable enclosing frame of virgin-origin Kraft board shall provide a rigid and durable enclosure. It shall be produced under an initiative for sustainable forest management. The frame shall be bonded to the media on all sides to prevent air bypass. Integral diagonal support members on the air entering and air exiting side shall be bonded to the apex of each pleat to maintain uniform pleat spacing in varying airflows.

3.0 Performance

3.1 - The filter shall have a Minimum Efficiency Reporting Value of MERV 13 when evaluated under the guidelines of ASHRAE Standard 52.2-2007. It shall meet the minimum requirements as published by the United States Green Building Council for LEED credit(s) as prescribed in published manuals for new or existing buildings.

3.2 - Initial resistance to airflow shall not exceed 0.40" for a 2" deep or 0.35" for a 4" deep filter at a velocity of 500 fpm.

3.3 - The filter shall be classified by Underwriters Laboratories as UL Class 2.

3.4 - Manufacturer shall guarantee the integrity of the filter pack to 2.0" w.g.

3.5 - Manufacturer shall provide evidence of facility certification to ISO 9001:2000.

Supporting Data - Provide product laboratory test report for each depth listed including all details as prescribed in ASHRAE Standard 52.2-2007.

Camfil Farr
United States Tel: (973) 616-7300 Fax: (973) 616-7771
Canada Tel: (450) 629-3030 Fax: (450) 662-6035
E-mail: camfilfarr@camfilfarr.com