

Two layers of heavy expanded aluminum, pleated together with a piece of polyurethane foam between make the:

Smith Perm-A-Foam Filter

With 40% more surface area than a regular air filter, this permanent filter is designed for years of filtering the smallest of particles.



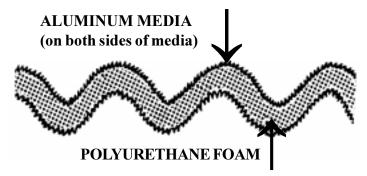
www.smithfilter.com 5000 - 41st Street Court * Moline, IL 61265-7583 USA LOCAL: 309-764-8324 * WATS: 800-447-4009 * FAX: 309-764-6816

PERM-A-FOAM FILTER 40% MORE FILTERING AREA

The Smith PERM-A-FOAM Aluminum filter is a permanent air filter designed for furnaces, air conditioners, air handling units and computer applications where smaller particles of dust and dirt are needed to be removed from the air. The perfect solution for eliminating the need for purchasing a new filter each time it comes times to change the filter. Since it is corrugated, there is 40% more surface area than a normal air filter, allowing the filter to capture more dust and contaminants without having to clean the filter as often as you would be replacing a throwaway filter.

CONSTRUCTION - The air filter media shall consist of 20 PPI polyurethane foam, 1/8" in thickness. It shall be non-allergenic, nontoxic, with a green coloring and corrugated between two pieces of .020 expanded aluminum, held together in a way it won't come apart without considerable effort. This filter pad will be enclosed in a .037 Aluminum Frame, commercially known as 3003-H4, roll formed to give it extra strength. The one piece frame is held together with heavy rivets at one corner.

The filter shall retain 290 grams of dust per 2.25 sq ft (20x20 filter). Resistance when clean is 0.05 wg at 350 FPM air velocity. Maximum resistance at capacity is 0.335 wg.



A cost effective approach to filtering air, the Smith PERM-A-FOAM is permanent and will last for years when properly cared for. This filter will fit into any existing furnace. There is no need for expensive equipment to filter the finer particles of pollen, dust, and other contaminants that are found in the air as this filter has a higher efficiency than the throwaway filters that are available. Since this is a heavy permanent filter, there are numerous applications this filter could be used for. The more common uses are in home and office furnaces and air conditioner units. Other applications include large air handling units on rooftops, computer equipment, intake for vehicles and manufacturing machinery that need fresh air to keep their motors running smoothly.

STOCK SIZES - Smith Filter carries a wide variety of stock sizes, available for immediate shipment. Actual size of "stock filters" are 1/2" under in length and width, 1/8" under in depth. (Example: 20x20x2 is actually $19 1/2 \times 19 1/2 \times 17/8$).

SPECIAL SIZES - Custom sizes are made to the customers exact specifications. There is no minimum order on these special sizes (as well as the stock sizes). These filters can be made from 3/8" to 2" in thickness.

AIR	DELIVERY	DATA	CHART

Net Face Velocity F.P.M.	Inches	ance in of W.G. thickness	C.F.M. Capacity by Size					
	1 Inch	2 Inch	10x20	16x20	16x25	20x20	20x25	24x24
267	.031	.035	282	467	597	600	768	897
356	.052	.059	376	623	796	800	1024	1197
445	.081	.090	469	779	995	1000	1279	1496
533	.125	.135	562	933	1192	1200	1532	1791
622	.170	.184	656	1089	1391	1400	1788	2091
711		.236	750	1244	1590	1600	2044	2390
800		.300	844	1400	1789	1800	2300	2689
889			938	1556	1988	2000	2556	2988
978			1032	1712	2187	2200	2812	3287

CLEANABILITY - To gain top efficiency from your heating or air conditioning unit with the Smith PERM-A-FOAM Filter, simply dust off excess dirt, flush out under hot water and replace. A mild detergent can be used if required. There's no need for oils or adhesives. Because of the Aluminum material in the filter, DO NOT use a strong Alkali Solution. Drain holes are punched in the bottom to allow for proper drainage after cleaning. After cleaning, it's important the filter is dry before returning it to the unit.

PADS AND ROLLS - For extra convenience and versatility, the PERM-A-FOAM filtering media is available in pads and rolls to be cut with snips or heavy scissors. Available in 1/2", 1" and 2" thickness in numerous lengths and widths. Also available is Smith Channel which allows for "in house" filter manufacturing - easily and economically.