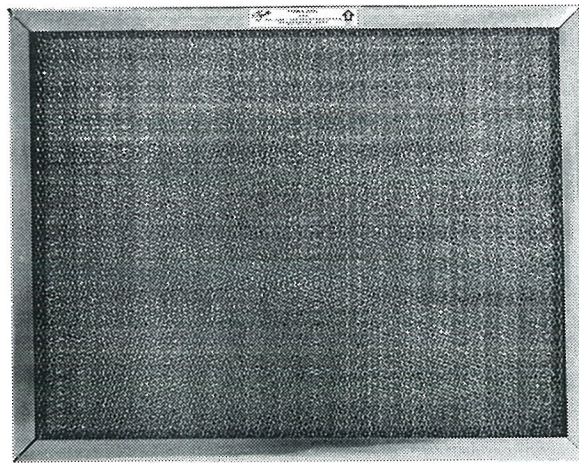


# SMITH

## PERM-A-STEEL FILTER



Six layers of expanded Galvanized Steel mesh,  
surrounded by a medium weight Galvanized Steel frame  
make up the:

### **Smith Perm-A-Steel Filter**

Designed as a low cost Galvanized filter to be used in  
light industrial, commercial, schools, office buildings  
and restaurant applications.

## SMITH

FILTER CORPORATION

[www.smithfilter.com](http://www.smithfilter.com)

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# PERM-A-STEEL FILTER

FOR NORMAL AIR HANDLING NEEDS

This SMITH PERM-A-STEEL Galvanized Steel filter is designed to be used in light industrial, commercial, restaurant, school and office building applications. These filter are designed for a variety of purposes, including air handling units of various styles and sizes, air conditioners, heaters, and light grease hood applications where state approved.

**CONSTRUCTION** - The filtering element shall be processed from sheet Steel, commercially known as Hot Dip Galvanized, no less than .0157 in thickness, expanded through no less than .020 feed. The material is expanded in a special pattern of various densities, laid at right angles to each other to allow for the dirty air to continuously change direction, leaving the dirt attached to the expanded material. The SMITH PERM-A-STEEL shall consist of not less than six layers of expanded material. The frame is made from formed Hot Dip Galvanized Steel, not less than .027 thick. Holes shall be punched on one side of frame to facilitate drainage after cleaning. Handles available upon request at an additional charge.

Filters 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.

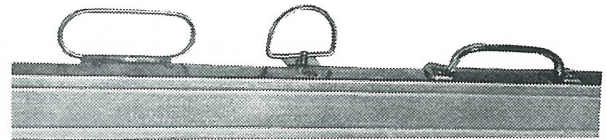
AIR DELIVERY DATA CHART

Net Face Velocity F.P.M.	Resistance in Inches of W.G. nominal thickness		C.F.M. Capacity by Size					
	1 Inch	2 Inch	10x20	16x20	16x25	20x20	20x25	24x24
267	.030	.025	282	467	597	600	768	897
356	.051	.040	376	623	796	800	1024	1197
445	.080	.069	469	779	995	1000	1279	1496
533	.125	.091	562	933	1192	1200	1532	1791
622	.180	.143	656	1089	1391	1400	1788	2091
711	.231	.188	750	1244	1590	1600	2044	2390
800	---	.292	844	1400	1789	1800	2300	2689
889	---	.370	938	1556	1988	2000	2556	2988
978	---	---	1032	1712	2187	2200	2812	3287

**Lightweight Galvanized steel construction resists rusting and corrosion plus retains its shape through numerous cleanings without the use of support rods. Drain holes allow for water and dirt to be quickly flushed from the filter during cleaning. Same patented designs as the more expensive filters, yet costs less.**

This unique filtering element is designed for maximum retention of dust and foreign particles in the air. Six layers of media account for a high efficiency and less clogging of the filter itself. Corrugation of the media reduces face loading and provides greater dust holding capacity. The media is encased in a Galvanized Steel frame, secured with rivets to assure long-life.

**HANDLES** - Three types of handles are available, at an additional cost. Bail, Lock-type and Rigid handles facilitate filter removal and installation.



**BAIL HANDLES** stock #1007  
**LOCK-TYPE HANDLES** stock # 1009  
**RIGID HANDLES** stock #1010

**STOCK SIZES** - As with all Smith Permanent filters, Smith Filter stocks a wide range of sizes. Actual size of "Stock Filters" are 1/2" under in length and with, 1/8" under in depth. (Example: 20x20x2 is actually 19 1/2 x 19 1/2 x 1 7/8).

**CLEANABILITY** - Because the PERM-A-STEEL is a lighter weight Galvanized Steel filter, it is easy to clean and the filter is more manageable than a heavier filter (especially with handles). The filter can be effectively cleaned with steam or a hot water pressure hose, with or without a mild detergent. The filter should hold up to many cleanings without losing shape or efficiency. For maximum air filtering efficiency, use Smith Filter Spray after each washing.

**SPECIAL SIZES** - Filters can be custom made to fit odd-sized applications. In ordering sizes other than those shown in the price book, state exact size required in length, width, and thickness. Thicknesses also available in 3" and 4".

**MAXIMUM TEMPERATURE RANGE ON THE PERM-A-STEEL FILTER IS 425 DEGREES F.**