

# Multi-Cell

Medium and High Efficiency Extended Surface Air Filters





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The Koch Multi-Cell is a high efficiency, extended surface air filter designed for use in HVAC applications of all types. Rigid construction makes the Multi-Cell a superior filter in variable-air-volume (VAV) systems, or in any application where extreme conditions require additional filter strength and reliability.

To meet the requirements of various filtration systems, Multi-Cells are offered in multiple standard face sizes, two depths, and three different efficiencies. Five unique frame and header styles are available to insure that each unit fits properly into the existing filter housing or framework. Contact your Koch Filter Corporation representative to determine which style your system requires.

## Multi-Cell Style Description



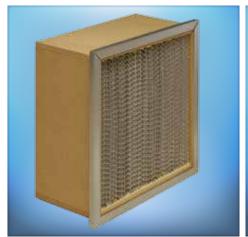
Style FM Cell Sides - Galvanized Steel Header location - Single header air entry side UL Class 1 Temperature rating - 180°



Style NHM Cell Sides - Galvanized Steel Header location - No header UL Class 1 Temperature rating - 180°



Style SBM Cell Sides - Galvanized Steel Header location – Double header, air entry and air exit sides UL Class 1 Temperature rating - 180°



Style FW
Cell Sides – Particle Board
Header location – Single galvanized steel
header, air entry side
UL Class 2
Temperature rating - 180°



Style SBW
Cell Sides – Particle Board
Header location – No header
UL Class 2
Temperature rating - 180°

# **Multi-Cell Construction**

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Cell Sides on Styles FM, NHM and SBM are constructed with heavy-duty galvanized steel. Styles SBW and FW are constructed with 3/4" Particle Board.

Header on Models FM, SBM, and FW is constructed with galvanized steel for problem-free installation into the filter housing.

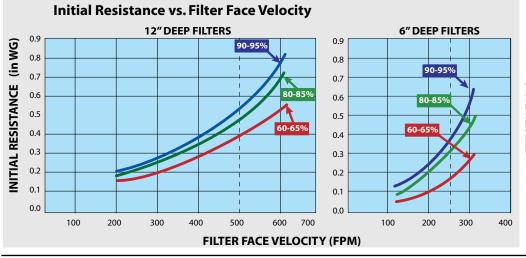
Filter Media is produced from glass fibers and is formed into a durable, graded-density micro-glass paper mat.

Corrugated aluminum separators provide proper media spacing and additional strength to the media pack. Each separator is folded on the leading edge to make it twice as durable and to prevent damage to the filter media. (Separators are also available with protective coating for highly corrosive atmospheres).

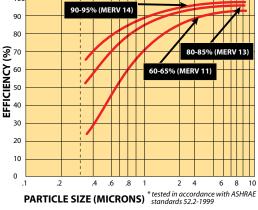
Media-to-Frame Sealant in galvanized steel models (FM, NHM, and SBM) is a specialized thermoplastic hot-melt adhesive. The sealant in Particle Board models (FW and SBW) is a durable polyurethane material. Both adhesive sealants have been engineered specifically for superior durability in high efficiency air filtration applications.

Special Construction Features are available for applications where environmental conditions may require additional filtration efficiency or durability.

- Protective faceguards can be secured to one or both sides of the filter.
- Protective gaskets for side-access or front-loading housings are available for normal and high temperature conditions.
- Multi-Cell filters are available with antimicrobial-treated filter media when required.



#### Efficiency by Particle Size\*



### **Multi-Cell High Capacity**

Multi-Cell filters are available in a High Capacity configuration with 30% more media area than the standard model. The additional surface area provides longer service life and enhanced filtration capabilities. Multi-Cell HC is an ideal for applications where maximum service.

choice for applications where maximum service life is of paramount concern. See Bulletin No. K-1105A for additional information.

### Multi-Cell HT For High Temperature Applications

Multi-Cell HT filters are constructed with aluminized steel frames designed for operation in applications with temperatures ranging from 750°F to 900°F, and are ideal for use in paint ovens where high temperatures may cause galvanized steel to scale or flake. Each filter has aluminized steel faceguards on both sides to protect the media against damage in shipping, handling, and actual operation. Three standard sizes, 24X24X12, 20X24X12 and 12X24X12, are available in two efficiencies, 90-95% and 60-65%. See Bulletin No. K-1205B for additional information.



#### Additional Information:

(1) Insert frame/header style designation "-\*" to complete model numbers.

Example: K9242412-SBW=Particle Board Cell Sides with No Header. See style descriptions on page two of this brochure.

- (2) Sizes listed above are nominal. Actual sizes are:
  - a) Nominal 12" units Less 5/8" on height & width and less ½" on depth
  - b) Nominal 6" units Less 5/8" on height & width and less 1/8" on depth
- (3) Multi-Cell filters are capable of operation up to 125% of rated face velocity.
- (4) Multi-Cell Operational Data is based on ASHRAE Test Standard 52.1 and 52.2.
- (5) Media area will vary slightly depending on the header configuration.
- A) Standard Multi-Cells may be installed with pleats vertical or horizontal. Multi-Cell HT should be installed with pleats vertical.
- B) Standard header thickness on Styles FM, SBM and FW is 13/16". 1-1/8" thickness is available if required.
- C) UL Classification:
  - 1) UL Class 1- Styles FM, SBM, NHM, HT
  - 2) UL Class 2 Styles FW and SBW
  - 3) Testing conducted according to UL Standard 900.
- D) Product design and specification are subject to change without notice.



#### Distributed by

Filter Services of Indiana 1550 Indiana Ave. Indianapolis, Indiana 46202 317-264-2123

### **Multi-Cell Operational Data**

	N	Data			
Model No. <sup>1</sup>	Nominal Size <sup>2</sup> HXWXD	Rated Air Flow Capacity (CFM)	Initial Resistance (in W.G.)	Recommended Final Resistance (in W.G.)	Media Area (Sq. Ft.) <sup>5</sup>
Multi-Cell™ 95	(90-95%) 4	MERV 14			
K9242412-*	24X24X12	2000	.55	1.5	125
K9252012-*	25X20X12	1750	.55	1.5	107
K9242012-*	24X20X12	1650	.55	1.5	106
K9202012-*	20X20X12	1400	.55	1.5	87
K9241812-*	24X18X12	1500	.55	1.5	92
K9251612-*	25X16X12	1400	.55	1.5	84
K9201612-*	20X16X12	1100	.55	1.5	68
K9241212-*	24X12X12	1000	.55	1.5	63
K9243012-*	24X30X12	2500	.55	1.5	150
K924246-*	24X24X6	1000	.33	1.5	64
K925206-*	25X20X6	875	.33	1.5	55
K924206-*	24X20X6	825	.33	1.5	54
K920206-*	20X20X6	700	.33	1.5	45
K924186-*	24X18X6	750	.33	1.5	47
K925166-*	25X16X6	700	.33	1.5	43
K920166-*	20X16X6	550	.33	1.5	35
K924126-*	24X12X6	500	.33	1.5	32
Multi-Cell™ 85	(80-85%) 4	MERV 13			
K8242412-*	24X24X12	2000	.54	1.5	125
K8252012-*	25X20X12	1750	.54	1.5	107
K8242012-*	24X20X12	1650	.54	1.5	106
K8202012-*	20X20X12	1400	.54	1.5	87
K8241812-*	24X18X12	1500	.54	1.5	92
K8251612-*	25X16X12	1400	.54	1.5	84
K8201612-*	20X16X12	1100	.54	1.5	68
K8241212-*	24X12X12	1000	.54	1.5	63
K8243012-* K824246-*	24X30X12	2500 1000	.54	1.5	150
	24X24X6		.28	1.5	64
K825206-*	25X20X6	875	.28	1.5	55
K824206-*	24X20X6	825	.28	1.5	54
K820206-*	20X20X6	700	.28	1.5	45
K824186-*	24X18X6	750	.28	1.5	47
K825166-*	25X16X6	700	.28	1.5	43
K820166-*	20X16X6	550	.28	1.5	35
K824126-*	24X12X6	500	.28	1.5	32
Multi-Cell™ 65	(60-65%) 4	MERV 11			
K6242412-*	24X24X12	2000	.39	1.5	125
K6252012-*	25X20X12	1750	.39	1.5	107
K6242012-*	24X20X12	1650	.39	1.5	106
K6202012-*	20X20X12	1400	.39	1.5	87
K6241812-*	24X18X12	1500	.39	1.5	92
K6251612-*	25X16X12	1400	.39	1.5	84
K6201612-*	20X16X12	1100	.39	1.5	68
K6241212-*	24X12X12	1000	.39	1.5	63
K6243012-*	24X30X12	2500	.39	1.5	150
K624246-*	24X24X6	1000	.15	1.5	64
K625206-*	25X20X6	875	.15	1.5	55
K624206-*	24X20X6	825	.15	1.5	54
K620206-*	20X20X6	700	.15	1.5	45
K624186-*	24X18X6	750	.15	1.5	47
K625166-*	25X16X6	700	.15	1.5	43
K620166-*	20X16X6	550	.15	1.5	35
K624126-*	24X12X6	500	.15	1.5	32