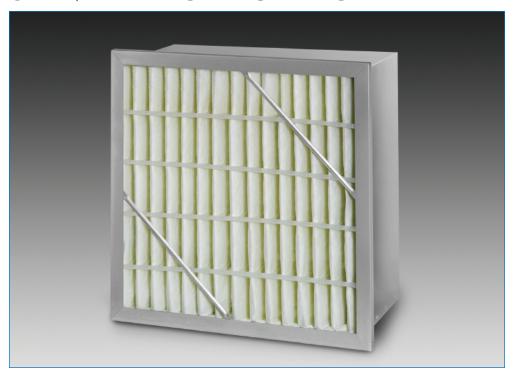


# **FILTRATION GROUP®**

# SYNTHETIC RIGID CELL



- Lofted ultra fine synthetic media eliminates fiber shedding
- Superior media integrity in high humidity applications
- Rigid format prevents unloading in variable air volume systems
- Used in both side access & built-up filter banks
- Replaces traditional pocket-style filters
- Galvanized steel frame provides rigid construction
- Available in box-style or single header



### **DESCRIPTION**

The Synthetic Rigid Cell is an extended surface, medium to high efficiency filter. Filtration Group is taking advantage of recent technology improvements in synthetic media to offer a synthetic version of our rigid cell filter. Superior performance in high humidity applications combined with the elimination of media fiber shedding make this filter a smart choice over traditional fiberglass high efficiency products. The lofted ultra fine synthetic media provides excellent dust holding capacity and coupled with its rigid construction virtually eliminates dust particle unloading downstream of the filter.

A galvanized steel frame, diagonal support bracing, moisture proof media, contour stabilizers and metal media support grid enhance the durability of this filter. This durability eliminates media oscillation and media pull-away. The media of this filter is adhesively bonded to all four sides of the frame to eliminate air by-pass. The Synthetic Rigid Cell is available in a MERV 11, MERV 13 and MERV 14 per ASHRAE Standard 52.2-2007.

#### **BENEFITS**

This filter is the ideal solution to IAQ problems that demand a high efficiency, long lasting rigid filter without costly modification to existing equipment. The secure, superior performance of this filter helps reduce costly maintenance.

The Rigid Cell can withstand many unfavorable conditions, especially variable air volume (VAV) without negatively effecting the performance of the filter.

## **APPLICATIONS**

The Synthetic Rigid Cell can be used in place of many high efficiency style filters. This filter may be used in spaces requiring 6" or 12" filters and is suitable for use in most commercial and industrial HVAC systems. This filter can upgrade your current systems by providing exceptional filter integrity and consistent performance.

The Synthetic Rigid Cell can be used as a pre-filter for higher efficiency products or a final filter in HVAC systems that require a high level of efficiency and cleanliness. It is designed for ease of installation in either side access systems or built-up banks.

# SYNTHETIC RIGID CELL



#### **DIMENSIONS AND PERFORMANCE DATA**

#### **MERV 14\*** (90–95% EFFICIENCY)

BOX** STYLE	SINGLE** HEADER	NOMINAL	INITIAL RESISTANCE(" w.g.)		
PART NO.	PART NO.	FILTER SIZE	250 fpm	375 fpm	500 fpm
14914	16428	24 x 12 x 6	0.49	0.78	1.10
14915	16429	20 x 20 x 6	0.49	0.78	1.10
14916	16430	24 x 20 x 6	0.49	0.78	1.10
14917	16431	24 × 24 × 6	0.49	0.78	1.10
14918	16432	24 x 12 x 12	0.23	0.35	0.47
14919	16433	20 x 20 x 12	0.23	0.35	0.47
14920	16434	24 x 20 x 12	0.23	0.35	0.47
14921	16435	24 x 24 x 12	0.23	0.35	0.47

#### MERV 13\* (80-85% EFFICIENCY)

BOX** STYLE	SINGLE** HEADER	NOMINAL	INITIAL RESISTANCE(" w.g.)		
PART NO.	PART NO.	FILTER SIZE	250 fpm	375 fpm	500 fpm
14922	16436	24 x 12 x 6	0.46	0.73	1.04
14923	16437	20 x 20 x 6	0.46	0.73	1.04
14924	16438	24 x 20 x 6	0.46	0.73	1.04
14925	16439	24 x 24 x 6	0.46	0.73	1.04
14926	16440	24 x 12 x 12	0.16	0.23	0.31
14927	16441	20 x 20 x 12	0.16	0.23	0.31
14928	16442	24 × 20 × 12	0.16	0.23	0.31
14929	16443	24 x 24 x 12	0.16	0.23	0.31

#### MERV 11\* (60-65% EFFICIENCY)

BOX** STYLE	SINGLE** HEADER	NOMINAL	INITIAL RESISTANCE(" w.g.)		
PART NO.	PART NO.	FILTER SIZE	250 fpm	375 fpm	500 fpm
14930	16444	24 x 12 x 6	0.12	0.21	0.32
14931	16445	20 x 20 x 6	0.12	0.21	0.32
14932	16446	24 × 20 × 6	0.12	0.21	0.32
14933	16447	24 × 24 × 6	0.12	0.21	0.32
14934	16448	24 x 12 x 12	0.07	0.12	0.20
14935	16449	20 x 20 x 12	0.07	0.12	0.20
14936	16450	24 × 20 × 12	0.07	0.12	0.20
14937	16451	24 x 24 x 12	0.07	0.12	0.20

#### SYNTHETIC RIGID CELL ENGINEERING SPECIFICATIONS

#### 1.0 General

- 1.1 Filters shall be Synthetic Rigid Cell extended surface pleated air filters as manufactured by Filtration Group, Inc.
- 1.2 Filters shall be available in 3 efficiency levels with a depth of 5.75" and 11.75"
- 1.3 Filters shall be UL Classified
- 1.4 Manufacturer shall provide documentation from an external certification body that the manufacturing location is ISO 9000 Registered.

#### 2.0 Filter Materials of Construction

- 2.1 Media shall be 100% synthetic that does not support microbial
- 2.2 Media shall be adhered to a metal grid to reduce fluttering during
- 2.3 Media shall be adhered to plastic separators designed to maintain filter configuration during life.
- 2.4 Media shall be bonded to frame on all sides eliminating by-pass,
- 2.5 Frame shall be made fully of 26 ga. Galvanized steel.

#### 3.0 Filter Performance

- 3.1 Filters shall be available in MERV 11, 13 and 14 when tested in accordance with ASHRAE 52.2-2007 Test Standards.
- 3.2 MERV 13 versions meets LEEDS regulations.
- 3.3 Filters shall be rated to withstand a continuous operating temperature of up to 150°F
- 3.4 Filters shall have a recommended final resistance of 1.5" w.g.

## **APPLICATION PARAMETERS**

Filter Media: Lofted synthetic Frame: 26 ga. galvanized steel Flammability: UL Classified

Recommended Final Resistance: 1.5" w.g.

Maximum Temperature: 180° F

Actual Dimension of Internal Frame: 13/16"

Distributed by:



FILTRATION GROUP®

© FGI 05/10

<sup>\*</sup> Reference ASHRAE 52,2-2007

\*\* Consult factory for additional sizes and performance data.
† Initial Resistance is based on Box style filters. Please add 0.03 to resistance to approximate the Single Header style filter.