

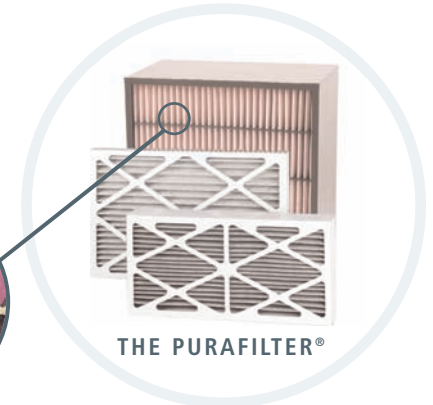
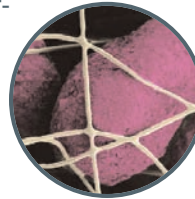
# PRODUCT BULLETIN

## 4 THE PURAFILTER® CG CLEANROOM GRADE (HVAC)

PURAFIL®



THE PURAFILTER® is a combination chemical and particulate filter designed to replace existing particulate filters in retrofit or rework applications. Purafil engineers are the first to successfully suspend sodium permanganate adsorbents in a bi-component fiber matrix.



THE PURAFILTER®

### STANDARD FEATURES

- 500 g/m<sup>2</sup> of Purafil engineered media
- Users choice of Purafil PSAM, CPS or PSPB media types
- 30 ft<sup>2</sup> of Purafil media per square foot of filter face area\*
- 17 pleats per linear foot\*
- Bi-component fiber matrix
- Reinforced media stabilizers
- Airflow: up to 500 ft./min (2.54 m/sec)
- Temperature Rating: -4° F to 125° F (-20° C to 51° C)
- Constructed of cleanroom-compatible materials
- Packaged individually and sealed in a non-porous bag

### OPTIONAL FEATURES

- Particulate overlay, 85% ASHRAE efficiency
- Nominal 1 inch single header or double header frame
- 20-gauge galvanized steel frame

\*Filters with 12" depth only

### THE PROBLEM

With each technological advancement, operations become increasingly sensitive and intricate. As a result, airborne molecular contamination (AMC) has evolved as a serious threat to cleanroom environments.

### PURAFIL PROVIDES THE SOLUTION

To remove AMC effectively and economically, Purafil offers the Purafilter CG.

Specifically designed for recirculation air handles, the Purafilter CG:

- reduces product defects and improves yield.
- prevents AMC-related corrosion caused by spills and leaks.
- eliminates odors and production downtime.

### PRODUCT DESCRIPTION

The Purafilter-CG is a combination pleated media filter that integrates our patented impregnated adsorbents to remove gaseous *and* particulate contaminants simultaneously.

Through our unique manufacturing process, we can combine media to provide superior removal capacity and broader contaminant control. Our engineers, chemists and laboratory technicians control the quality of the Purafilter CG by evaluating and enhancing media formulas, design configurations, and production processes.

Our manufacturing process also allows for a high media loading, which reduces the cost of ownership by prolonging service life and reducing maintenance.

The Purafilter CG's bi-component fiber matrix does not use adhesives, so media particles are fully available to react with AMC. To ensure high filtration efficiency, adsorbent particles are uniformly distributed throughout the filter structure.

### MEDIA TYPES

The Purafilter-CG is available in CPS™, PSAM™, and PSPB™ media types to remove specific gases in specific areas of cleanrooms. These media permanently remove AMC by transforming gases into harmless solids and trapping them within the adsorbent particles.

### CLEANROOM COMPATIBLE, GUARANTEED

Third-party testing verifies that the Purafilter CG is constructed of cleanroom-compatible material that do not emit dopants, metals, organics, or other molecular contaminants at levels that would pose a risk to cleanroom processes.

### PRODUCT BENEFITS

• **TARGETED AMC CONTROL:** Patented filter is available in three media types: PSAM™ for acid-base removal, CPS™ for acid-condensable removal, and PSPB™ for acid-dopant removal.

• **SIMULTANEOUS REMOVAL OF AMC AND PARTICULATES:** Adding an integral 85% layer provides AMC *and* particulate control in recirculation air handling units.

• **LONGER LIFE AND IMPROVED PERFORMANCE:** Purafil has combined the benefits of patented adsorbent media and proven technology to offer an unparalleled filter for AMC removal.

• **PERMANENT GAS REMOVAL:** The Purafilter CG will not desorb like traditional activated carbon filters. Gases are removed through irreversible chemical reactions.

• **LOW PRESSURE DROP:** Pressure drop at 500 fpm (2.54 mps) is 0.46 iwg (115 Pa) for the Purafilter CG.

# PURAFILTER® CG



## SIZES AVAILABLE:

| SIZE (inches) | (millimeters)     |
|---------------|-------------------|
| 24 x 24 x 12  | (610 x 610 x 305) |
| 24 x 20 x 12  | (610 x 508 x 305) |
| 20 x 20 x 12  | (508 x 508 x 305) |
| 12 x 24 x 12  | (305 x 610 x 305) |

## MEDIA WEIGHT BY FILTER SIZE:

| SIZE (inches) | WEIGHT (lbs / kgs) |
|---------------|--------------------|
| 24 x 24 x 12  | 12.59 / 5.71       |
| 24 x 20 x 12  | 10.73 / 4.87       |
| 20 x 20 x 12  | 8.90 / 4.04        |
| 12 x 24 x 12  | 5.99 / 2.72        |

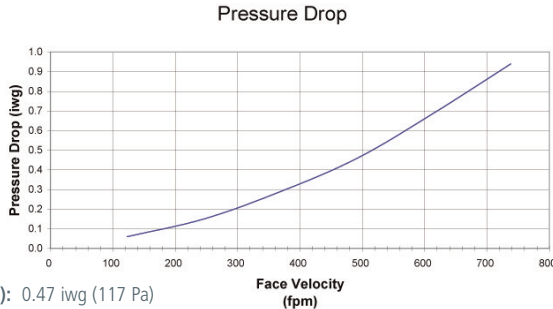
### BOX STYLE

**NOMINAL SIZE:** 24 x 24 x 12 in  
**ACTUAL SIZE:** 23 <sup>3</sup>/<sub>8</sub> x 23 <sup>3</sup>/<sub>8</sub> x 11 <sup>1</sup>/<sub>2</sub> in  
 (594 x 594 x 292 mm)

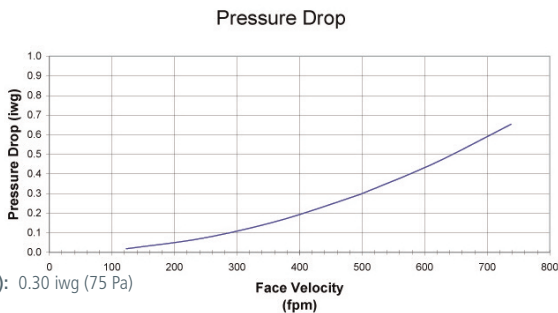
ALL SIZES AVAILABLE. CALL FOR DETAILS.

**PLEAT COUNT:** 35 Pleats  
**SURFACE AREA:** 123 ft<sup>2</sup>  
**AIRFLOW CAPACITY:** 2,000 cfm

**MEDIA:** 85%  
**PRESSURE DROP:**



**MEDIA:** Naked  
**PRESSURE DROP:**



### SINGLE HEADERED

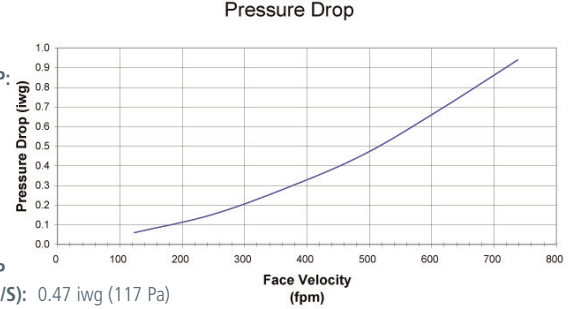
**NOMINAL SIZE:** 24 x 24 x 12 in  
**ACTUAL SIZE:** 23 <sup>3</sup>/<sub>8</sub> x 23 <sup>3</sup>/<sub>8</sub> x 11 <sup>1</sup>/<sub>2</sub> in  
 (594 x 594 x 292 mm)

ALL SIZES AVAILABLE. CALL FOR DETAILS.

**HEADER NOMINAL SIZE:** 1 in  
**HEADER ACTUAL SIZE:** <sup>13</sup>/<sub>16</sub> in (21 mm)

**PLEAT COUNT:** 32 Pleats  
**SURFACE AREA:** 105 ft<sup>2</sup>  
**AIRFLOW CAPACITY:** 2,000 cfm

**MEDIA:** 85%  
**PRESSURE DROP:**



**MEDIA:** Naked  
**PRESSURE DROP:**

