



FILTER SPECIFICATION PROCEDURE

SERIES 3000

Molecular Filter

Molecular filters specified for installation shall be series 3000 as manufactured by Filtration Group, Inc.

The filter shall be constructed of a nonwoven media in which sorbent particles are bonded directly to the fiber without any type of adhesive additive. The filter shall be constructed in such a way as to provide essentially dust free operation. Nominal 24"x24"x12" filters shall have an initial pressure drop (resistance) of not more than 0.40" @ 2000 cfm.

Filter Size

Nominal dimensions for full size single header series 3000 filters shall be 24"x24"x12". Exact filter dimensions are 23.38"x23.38"x11.5".

Frame Enclosure

The frame shall be of rigid, injection-molded high impact polystyrene (HIPS) construction. A sealant shall be used to encapsulate the media to the filter casing, preventing any bypass. Each frame shall be labeled with size, type, and airflow. The filter shall be sealed into a non-porous bag to inhibit adsorption during shipment and storage.

Filter Media

The filter shall contain a carbon loaded nonwoven media containing 500 g/m² of activated carbon with 1100 m²/g of total surface area in the base carbon. Nominal 24"x24"x12" filters shall contain 104 ft² of media surface area. Four different grades of media are available to target specific contaminants:

- Grade 653:** Enhanced performance high activity carbon for the removal of General VOCs
- Grade 651:** Impregnated carbon for removal of reactive organics such as formaldehyde and products of combustion like those found in diesel and aircraft exhaust
- Grade 875:** Impregnated carbon for the removal of acid gases
- Grade 147:** Impregnated carbon for the removal of ammonia and amine compounds

Performance

Each filter shall evidence a minimum initial efficiency of not less than 95% for specified contaminants when laboratory tested under dynamic conditions. The filters shall have been evaluated for contaminant removal performance at 500 fpm. Detailed performance reports are available from manufacturer.