HEGA SERIES 4000 ENGINEERING SPECIFICATION

1.0 General

1.1 Filters shall be Aerostar® HEGA Series 4000 odor removal pleated air filters as manufactured by Filtration Group.

1.2 Filters shall be available at exact face dimensions required by the application in a variety of depths based on available frame extrusions.

1.3 Filters shall be manufactured by an ISO 9001 registered company.

2.0 Filter Materials of Construction

2.1 Media shall be a carbon-loaded nonwoven consisting of 100% synthetic fibers that do not support microbial growth. Media shall be loaded with at least 500 g/m² of coconut shell activated carbon with at least 1100 m²/g of available surface area and appropriate chemical enhancement. Media shall have no other adhesives that reduce the available surface area of the sorbent.

2.2 Frame shall be of extruded aluminum. Pleat separators composed of high impact polystyrene (HIPS) shall be inserted at regular intervals on both upstream and downstream sides to ensure pleats remain open to air flow.

2.3 A low off-gassing sealant shall be used to encapsulate the media within the frame to prevent bypass.

2.4 Filters shall be sealed in a non-porous bag to inhibit contamination during shipment and storage.

3.0 Filter Performance

3.1 Filters shall demonstrate effectiveness against key contaminants when tested as recommended in ASHRAE 145.2 Test Standard.

3.1.1 HEGA 653 – Toluene and other VOCs

3.1.2 HEGA 651 – Formaldehyde and components found in diesel and aircraft exhaust

3.1.3 HEGA 876 – Acid gases (e.g. H₂S, SO₂, and others)

3.1.4 HEGA 147 – Ammonia and other alkalines

3.2 Filters shall be rated to withstand a continuous operating temperature of at least 120°F.

3.3 Filters shall not shed significant quantities of dust or particles downstream during normal operation.