**1.0 General**

**1.1** - Air filters shall be V-Bank mini-pleat fiberglass disposable type with pleat separators, polyurethane pack-to-frame sealant, and have an ECI value of five stars.

**1.2** - Sizes shall be as noted on drawings or other supporting materials.

**2.0 Construction**

**2.1** - Filter media shall be of microfine glass fibers formed into uniform pleats with a spacing of 8.5 pleats per inch and a uniform pleat height of 22mm. Pleats shall be separated at 25mm intervals to ensure pleat separation and uniform airflow through the filter pack.

**2.2** - Pleats media packs shall be assembled into a V-bank configuration with sufficient total media area to meet airflow requirements. The filter outlet shall be radial in shape with a maximum of 60% open area to maintain low-pressure drop and uniform airflow.

**2.3** - The media packs shall be bonded to the inside periphery of an ABS enclosing frame with a polyurethane sealant. The enclosing frame shall include top and bottom molded tracks as in integral part of the frame to ensure a proper seal.

**2.4** - Media packs shall be recessed at least 1” from the air-entering side of the enclosing frame to allow uniform airflow when a prefilter is mounted directly to the enclosing frame.

**2.5** - Rigid plastic end caps shall be mechanically fastened to the top and bottom of the media pack enclosing structure to ensure a rigid and durable filter.

**2.6** - Carrying handles shall be an integral part of the filter frame and shall bridge from media pack to media pack providing additional filter support and filter rigidity. Handles shall include fastener connection locations for the application of spring mounting fasteners when the filter is applied in reverse flow applications. .

**3.0 Performance**

**3.1** - The filter shall have a Minimum Efficiency Reporting Value of MERV (13, 14, 16) when evaluated under the guidelines of ASHRAE Standard 52.2. It shall also have a MERV-A rating of (13, 14, 16) when evaluated under ASHRAE Standard 52.2, Appendix J. It shall have an efficiency of (ePM1-60, ePM1-70, ePM1-95) when evaluated per ISO filter testing standard 16890.

**3.2** - Filter shall be listed UL 900 by Underwriters Laboratories.

**3.3 -** The filter shall be capable of withstanding 10.00” w.g. without failure of the media pack.

**3.4** - Manufacturer shall provide evidence of facility certification to ISO 9001:2015.

**3.5** - Filter shall have a 5-Star rating when evaluated per Energy Cost Index (ECI).

**Supporting Data** - Provide product test reports for each listed efficiency including all details as prescribed in ASHRAE Standards 52.2 including Appendix J.

Filters shall be Camfil Durafil ES3 or equal. (Items in parentheses ( ) require selection)

Dec/2024