

## AAF VariCel 2+ Specifications

### 1.0 GENERAL:

The purpose of this specification is to establish performance criteria and identify physical properties that are pertinent and necessary for proper filter performance. Conformance to all items in the specifications is the responsibility of the bidder.

### 2.0 PERFORMANCE CHARACTERISTICS

Filters of the size and air flow capacity shall meet the following rated performance specifications based on the ASHRAE 52.2 test method. Pertinent tolerances specified in Section 7.4 of the Air-Conditioning and Refrigeration Institute (ARI) Standard 850-93 shall apply to the performance ratings. All testing is to be conducted on filters with a nominal 24" x 24" face dimension.

Minimum Efficiency Reporting (MERV)	15	14	11
Nominal Size (Width x Height x Depth)	24x24x4	24x24x4	24x24x4
Rated Air Flow Capacity (CFM)	1,968	1,968	1,968
Final Resistance (In W. G.)	1.5	1.5	1.5
Rated Initial Resistance (In W.G.)*	0.41	0.33	0.27
Gross Media Area (Sq. Ft. for 24x24)	60	60	60

\* Add 0.07" resistance for SH models

- 2.1 The filters shall be UL Classified and Listed by Underwriters' Laboratories, Inc. when tested according to U. L. Standard 900 and CAN 4-S111.

### 3.0 BID ATTACHMENTS:

One (1) ASHRAE 52.2 test report from an independent, commercially operated test lab. The supplier shall grant permission to the test lab which conducts the ASHRAE tests to verbally verify the test results to the purchaser on request.

### 4.0 PHYSICAL CHARACTERISTICS:

Each filter shall consist of an embossed media pack contained in a high impact polystyrene plastic frame. The filters shall be capable of operating at temperatures up to 150 degrees Fahrenheit. The filters must either fit without modification or be adaptable to the existing holding frames. If adapters are required, they must be included in the total bid price and notation of this requirement made on the bid form.

#### 4.1 Frame

Box style configuration - The frame shall be made of high impact polystyrene plastic. The inside of the filter frame shall be bonded to the pleated media pack on all four sides with a two-component polyurethane adhesive. Frames must be capable of exposure to moisture without weakening or developing rust or other foreign contaminants.

Header style configuration - The frame shall be made of high impact polystyrene plastic. The header shall be sized to properly fit in nominal 1" side access housings and channels. The inside of the filter frame shall be bonded to the pleated media pack on all four sides with a two-component polyurethane adhesive. Frames must be capable of exposure to moisture without weakening or developing rust or other foreign contaminants.

#### 4.2 Media

The media shall be an embossable, gradient density synthetic material made of 100% polypropylene fibers.

#### 4.3 Separators

The media shall be embossed to form the pleat separators in a V-shaped pleat configuration. No adhesive is necessary between the pleats, as the media is bonded to itself during the pleat formation process without additional adhesives. The embossed media process is required to provide the minimum filter pressure drop.