

**AAF VariCel RF
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	12	11
Nominal Size (Width x Height x Depth)	24x24x12	24x24x12	24x24x12	24x24x12
Rated Air Flow Capacity (CFM)	2,000	2,000	2,000	2,000
Final Resistance (In W. G.)	1.5	1.5	1.5	1.5
Rated Initial Resistance (In W. G.)	0.56	0.36	0.25	0.23
Gross Media Area (Sq. Ft. for 24x24)	62	62	62	62

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 a pleated media pack contained in galvanized steel cell sides. The filters shall be capable of operating at temperatures up to 200 degrees F.

4.1 Cell Sides

The filter cell sides shall be constructed of 30 gauge galvanized steel. The header(s) and cell sides must be of unitized design, where the cell sides are interlocked with the header along the entire perimeter of the filter. This is to provide maximum sealing around the filter, eliminating the potential for air bypass. To further seal the contact between the header and cell sides, a small piece of tape is applied at each corner of the filter to eliminate any bypass that may occur. The rear flanges of the cell sides should also be crimped to eliminate sharp edges and riveted to eliminate air bypass.

4.2 Header Options

In addition to a no header version, filters are available with a single header (SH) or a double header (DH). Headers shall be made of 28 gauge galvanized steel, and be 13/16" thick.

4.3 Media

The media shall be made of polypropylene meltblown fibers, backed by a spun bonded material, which provides strength and durability. The media is to be color coded to define the rated efficiency of the filter as follows:

- MERV 15 = Yellow
- MERV 14 = Pink
- MERV 12 = Green
- MERV 11 = White

4.4 Media/Pleat Support

The media shall be laminated to an expanded galvanized metal grid, and pleated. To maintain proper pleat spacing and configuration throughout the life of the filter, polypropylene pleat stabilizers are used. A minimum of 4 stabilizers per side of the filter (24x24x12) is required. A vertical support strap runs perpendicular to the pleat stabilizers, adding additional strength and support to the filter.