AAF VariCel HT
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)	14 / 11	14 / 11	14 / 11
Rated Maximum Operating Temp (F)	500	725	900
Nominal Size (Width x Height x Depth)	24x24x12	24x24x12	24x24x12
Rated Air Flow Capacity (CFM)	2,000	2,000	2,000
Final Resistance (In W. G.)	1.5	1.5	1.5
Rated Initial Resistance (In W. G.)	0.65 / 0.50	0.70 / 0.55	0.75 / 0.60
Gross Media Area (Sq. Ft. for 24x24)	125 / 105	140	175

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 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 aluminized steel cell sides. The filters shall be capable of operating at temperatures up to 500/725/900 degrees F. The filters must either fit without modification or be adaptable to the existing holding frames or housings.

4.1 Cell Sides and Header
The filter cell sides and header shall be constructed of 28 gauge aluminized steel. The header 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. The rear flanges of the cell sides should be crimped to eliminate sharp edges and riveted to eliminate air bypass. One-half inch wide bars of 20 gauge aluminized steel are riveted to the air leaving and air entering sides of the filter to add supplemental support to the media pack. 24x24x12 filters shall have support bars running both horizontal and vertical on the air leaving side.

4.2 Media
The media shall be made of micro glass fibers with a water repellent binder. The media shall be a dual density construction, with coarser fibers on the air entering side and finer fibers on the air leaving side.

4.3 Separators
The media shall be pleated using corrugated aluminum separators. The edges of the separators shall be rolled over, to prevent any accidental abrasion or cutting of the media.

4.4 Faceguards
Faceguards shall be utilized on both the air entering and air leaving sides of the filter. The faceguard material shall be 24 gauge, flattened expanded aluminized steel.

4.5 Galvanized parts, adhesives, silicones and sealants are not acceptable because of emission of toxic materials at elevated temperatures which could adversely affect personnel or processes.