

**INTERPRETATION IC 52.2-1999-4 OF
ANSI/ASHRAE STANDARD 52.2-1999**
*Method of Testing General Ventilation Air-Cleaning Devices
for Removal Efficiency by Particle Size*

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Request from: Charles Rose (E-mail: crose@AAFINTL.com), AAF International – Retired, 4012 Gloucester Road, Louisville, KY 40207

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 52.2-1999, Section 12.4, regarding airflow rate as the basis for reporting MERV.

Background: Air filters in commercial applications are generally offered in a variety of different face dimensions in order to fill housings of non-uniform dimensions. For example, the common filter size of 24" x 24" will be used predominantly but when bank is odd number of feet, there will be a row of 12" x 24" to fill up the housing. The same will hold for other dimensions not evenly divisible by 2 ft. Obviously all operate at the same face velocity.

In residential applications there are a number of so-called "standard sizes" all designed for the same face velocity. These sizes would all be the same depth, but with variations in length and width.

Standard 52.2 implies that each size must be tested and MERV reported at its rated volumetric flow.

It seems to me that this requires some unnecessary testing just to be able to have a test report with volumetric flow stated. The common value of face velocity (typically 500 ft / minute in commercial applications) is sufficient to demonstrate MERV for all filters of the same design and depth and varying face dimensions.

This was discussed at the January 2003 meeting of SSPC 52.2 in Chicago and it was suggested that for "families of filters" one test report (e.g. 24" W x 24" H and 12" D rated at 2000 CFM or 500 ft./min) might be used to verify the MERV of all filters in that family at 500 ft./min, even though the others will be rated at different volumetric flow rates.

Interpretation: For family of filters, I understand that I can test one size filter at its rated volumetric flow rate to verify MERV of all sizes of filters in the family operating at the same face velocity as tested filter, but at different volumetric flow rates. Family for this case would be defined as filters of same design and depth but having different face dimensions - width and height.

Question: Is this interpretation correct?

Answer: Yes.

Comments: To be more specific, same family of filters means

- Same type of filtering mechanism (same media)
- Same "filtering surface / front face" ratio as close as technically possible
- Same depth