**Section 518.TABLE C Minimum Efficiency Reporting Values**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Minimum Efficiency Reporting Values (MERV)**  **ASHRAE Standard 52.2** | | | | | | |
| Group Number | MERV Rating | E1  Average Particle Size Efficiency (PSE)  0.3-1.0 Microns | E2  Average Particle Size Efficiency (PSE) 1.0-3.0 Microns | E3  Average Particle Size Efficiency (PSE) 3.0-10.0 Microns | Average Arrestance (ASHRAE 52.1) | Minimum Final Resistance (in Water Gauge) |
|  |  |  |  |  |  |  |
|  | MERV 1 | - | - | < 20% | <65% | 0.3m |
|  |  |  |  |  |  |  |
|  | MERV 2 | - | - | < 20% | 65-69.9% | 0.3m |
| 1 | MERV 3 | - | - | < 20% | 70-74.9% | 0.3m |
|  | MERV 4 | - | - | < 20% | 75% or > | 0.3m |
|  |  |  |  |  |  |  |
|  | MERV 5 | - | - | 20-34.9% | - | 0.6m |
| 2 | MERV 6 | - | - | 35-49.9% | - | 0.6m |
|  | MERV 7 | - | - | 50-69.9% | - | 0.6m |
|  | MERV 8 | - | - | 70-84.9% | - | 0.6m |
|  |  |  |  |  |  |  |
|  | MERV 9 | - | <50% | 85% or > | - | 1.0m |
| 3 | MERV 10 | - | 50-64.9% | 85% or > | - | 1.0m |
|  | MERV 11 | - | 65-79.9% | 85% or > | - | 1.0m |
|  | MERV 12 | - | 80-89.9% | 90% or > | - | 1.0m |
|  |  |  |  |  |  |  |
|  | MERV 13 | < 75% | 90% or > | 90% or > | - | 1.4m |
| 4 | MERV 14 | 75-84.9% | 90% or > | 90% or > | - | 1.4m |
|  | MERV 15 | 85-94.9% | 90% or > | 90% or > | - | 1.4m |
|  | MERV 16 | 95% or > | 95% or > | 95% or > | - | 1.4m |

Notes:

1. ASHRAE Standard 52.2 tests are to be conducted at one of seven air flow rates.

|  |  |
| --- | --- |
| 118 FPM (.60 m/s) | 492 FPM (2.50 m/s) |
| 246 FPM (1.25 m/s) | 630 FPM (3.20 m/s) |
| 295 FPM (1.50 m/s) | 748 FPM (3.80 m/s) |
| 374 FPM (1.90 m/s) |  |

2. The air flow rate at which the filter was tested is included in the MERV rating (MERV 10 @ 2.5m/s).

3. Filters with an E3 efficiency of less than 20% (MERV 1 through MERV 4) must also be tested for arrestance per ASHRAE Standard 52.1.

4. Final resistance must be at least twice the initial resistance at the test air flow rate, or the values shown in the table above, whichever is greater.

(Source: Added at 33 Ill. Reg. 8317, effective June 4, 2009)