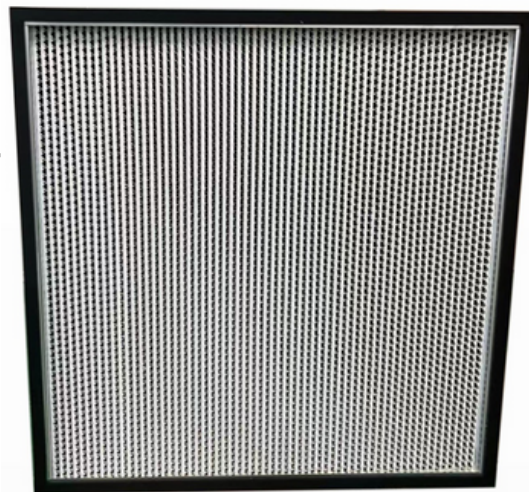


# Separator HEPA Filter

Amorair HEPA filter with separator is a device used for terminal filtration in the filtration system. It uses glass fiber as filter material, corrugated paper or aluminum foil as separator, polyurethane sealant as seal, galvanized sheet/stainless steel sheet/aluminum alloy as outer frame, and each unit has been strictly tested. This filter can filter out airborne particles below 0.3  $\mu\text{m}$  and is widely used in places with high cleanliness requirements.



- Ultra Fine Glass Fiber
- High Dust Holding Capacity
- Low Pressure Drop
- Available for Custom Sizes
- Optional Faceguard/ Gasket
- 100% Scan Tested According To EN1822/ISO29463

## Specifications

|                 |                                                        |
|-----------------|--------------------------------------------------------|
| Frame Material  | Aluminum / Galvanized Steel / Stainless Steel          |
| Media           | Moisture-resistant Fiberglass                          |
| Max Temperature | 80 °C (180 °F)                                         |
| Euro Efficiency | H13 ,H14                                               |
| U.S. Efficiency | 99.95%, 99.995% @ MPPS                                 |
| Separator       | Aluminum Foil /Corrugated Cardboard /Stainless Steel   |
| Header          | No Header /Single Header /Double Header                |
| Sealant         | Polyurethane                                           |
| Depth           | 80mm (3.1") /150mm (5.9") /220mm (8.7") /292mm (11.5") |

# PRODUCT PARAMETERS

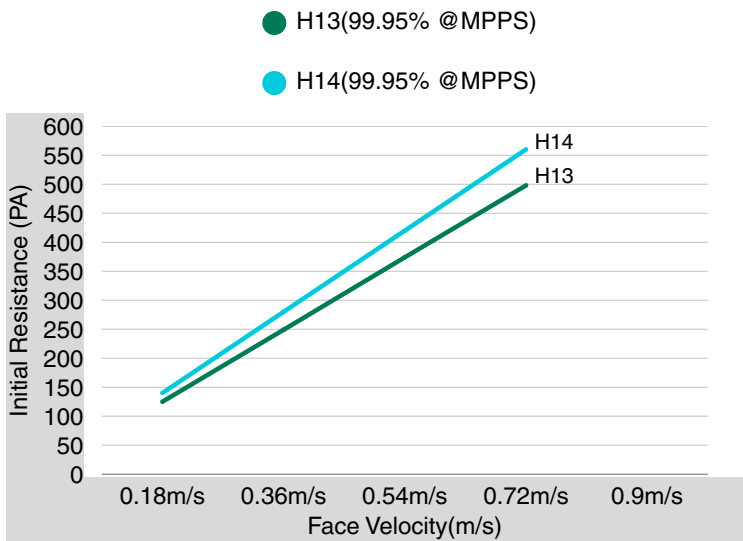
## ◀◀ Separator HEPA Filter- Standard Capacity ▶▶

| INTERNATIONAL STANDARD           |               |           |                    |                        |                             |                   |                                        |
|----------------------------------|---------------|-----------|--------------------|------------------------|-----------------------------|-------------------|----------------------------------------|
| Actual Size (mm)<br>(W*H*D)      | Separator     | Header    | Air Flow<br>(m³/h) | Face Velocity<br>(m/s) | Initial Resistance (Pa)     |                   |                                        |
|                                  |               |           |                    |                        | H13                         | H14               | Recommended<br>final resistance        |
| 305x610x80                       | Aluminum Foil | No Header | 200                | 0.36                   | 249                         | 280               | 2 - 2.5 times of<br>initial resistance |
| 610x610x80                       | Aluminum Foil | No Header | 420                | 0.36                   | 249                         | 280               |                                        |
| 305x610x150                      | Aluminum Foil | No Header | 420                | 0.77                   | 249                         | 280               |                                        |
| 610x610x150                      | Aluminum Foil | No Header | 900                | 0.77                   | 249                         | 280               |                                        |
| 305x610x220                      | Aluminum Foil | No Header | 650                | 1.2                    | 249                         | 280               |                                        |
| 610x610x220                      | Aluminum Foil | No Header | 1400               | 1.2                    | 249                         | 280               |                                        |
| 305x610x292                      | Aluminum Foil | No Header | 860                | 1.6                    | 249                         | 280               |                                        |
| 610x610x292                      | Aluminum Foil | No Header | 1860               | 1.6                    | 249                         | 280               |                                        |
| U.S STANDARD                     |               |           |                    |                        |                             |                   |                                        |
| Nominal Size<br>(in.)<br>(W*H*D) | Separator     | Header    | Air Flow<br>(CFM)  | Face Velocity<br>(FPM) | Initial Resistance (in W.G) |                   |                                        |
|                                  |               |           |                    |                        | 99.95%<br>@ MPPS            | 99.995%<br>@ MPPS | Recommended<br>final resistance        |
| 12x24x3                          | Aluminum Foil | No Header | 118                | 71                     | 1.00                        | 1.12              | 2 - 2.5 times of<br>initial resistance |
| 24x24x3                          | Aluminum Foil | No Header | 247                | 71                     | 1.00                        | 1.12              |                                        |
| 12x24x6                          | Aluminum Foil | No Header | 247                | 152                    | 1.00                        | 1.12              |                                        |
| 24x24x6                          | Aluminum Foil | No Header | 530                | 152                    | 1.00                        | 1.12              |                                        |
| 12x24x9                          | Aluminum Foil | No Header | 383                | 236                    | 1.00                        | 1.12              |                                        |
| 24x24x9                          | Aluminum Foil | No Header | 824                | 236                    | 1.00                        | 1.12              |                                        |
| 12x24x12                         | Aluminum Foil | No Header | 506                | 315                    | 1.00                        | 1.12              |                                        |
| 24x24x12                         | Aluminum Foil | No Header | 1095               | 315                    | 1.00                        | 1.12              |                                        |

- Performance Initial Resistance Tolerance: ±10%
- Example dimensions displayed; custom sizes available

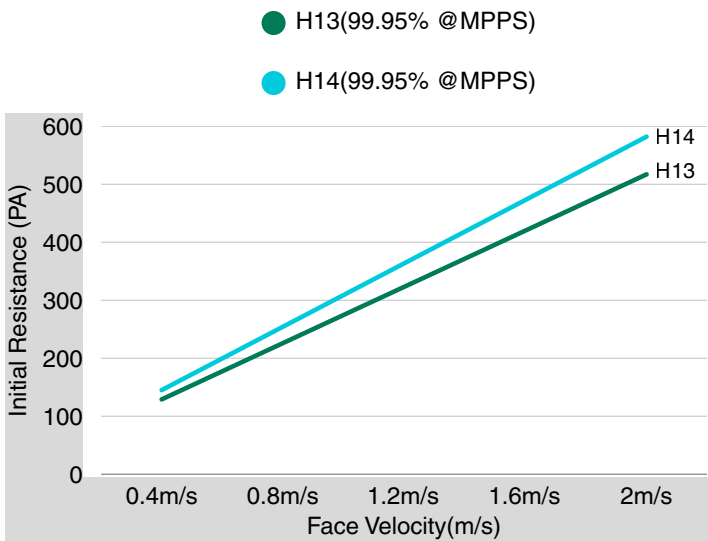
# PERFORMANCE DATA

Initial Resistance vs. Face Velocity



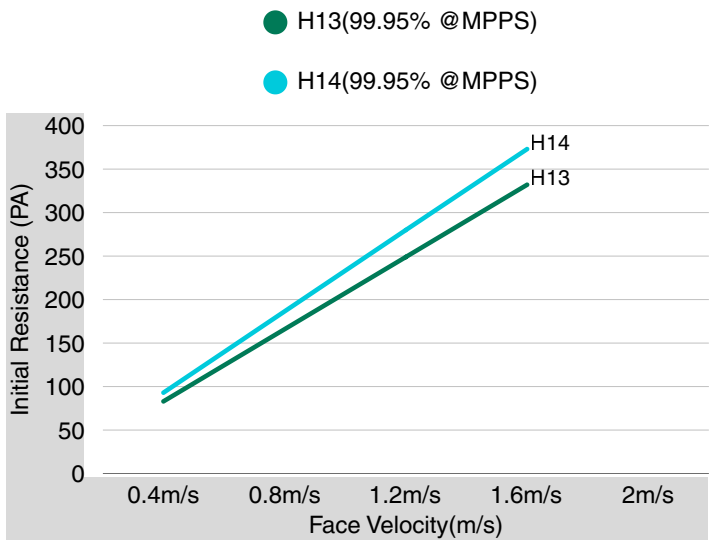
Product size: 610×610×80(mm)/24×24×3(inch)

Initial Resistance vs. Face Velocity



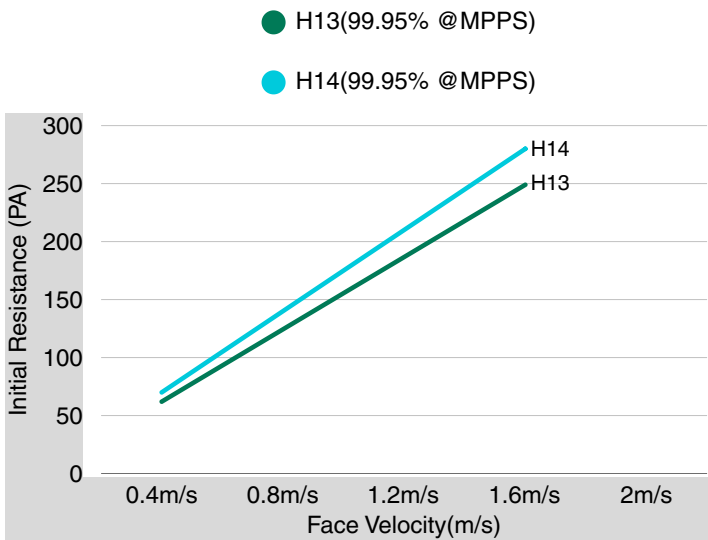
Product size: 610×610×150(mm)/24×24×6(inch)

Initial Resistance vs. Face Velocity



Product size: 610×610×220(mm)/24×24×9(inch)

Initial Resistance vs. Face Velocity



Product size: 610×610×292(mm)/24×24×12(inch)

# PRODUCT PARAMETERS

## ◀◀ Separator HEPA Filter- High Capacity ▶▶

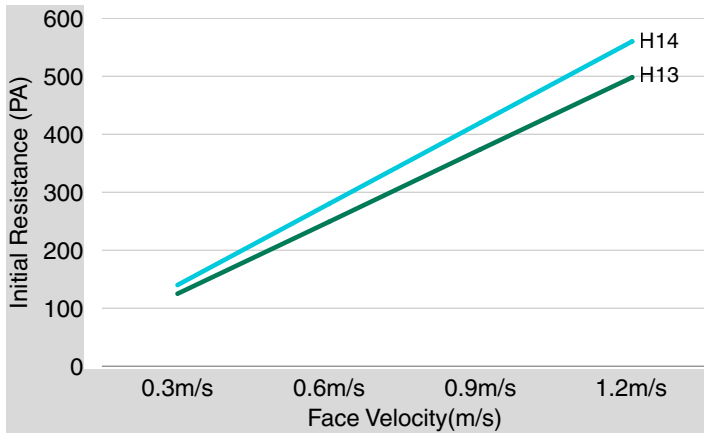
| INTERNATIONAL STANDARD           |               |           |                    |                        |                             |                  |                                        |
|----------------------------------|---------------|-----------|--------------------|------------------------|-----------------------------|------------------|----------------------------------------|
| Actual Size (mm)<br>(W*H*D)      | Separator     | Header    | Air Flow<br>(m³/h) | Face Velocity<br>(m/s) | Initial Resistance (Pa)     |                  |                                        |
|                                  |               |           |                    |                        | H13                         | H14              | Recommended<br>final resistance        |
| 305x610x80                       | Aluminum Foil | No Header | 400                | 0.6                    | 249                         | 280              | 2 - 2.5 times of<br>initial resistance |
| 610x610x80                       | Aluminum Foil | No Header | 800                | 0.6                    | 249                         | 280              |                                        |
| 305x610x150                      | Aluminum Foil | No Header | 550                | 1                      | 249                         | 280              |                                        |
| 610x610x150                      | Aluminum Foil | No Header | 1170               | 1                      | 249                         | 280              |                                        |
| 305x610x220                      | Aluminum Foil | No Header | 850                | 1.55                   | 249                         | 280              |                                        |
| 610x610x220                      | Aluminum Foil | No Header | 1820               | 1.55                   | 249                         | 280              |                                        |
| 305x610x292                      | Aluminum Foil | No Header | 1120               | 2                      | 249                         | 280              |                                        |
| 610x610x292                      | Aluminum Foil | No Header | 2400               | 2                      | 249                         | 280              |                                        |
| U.S STANDARD                     |               |           |                    |                        |                             |                  |                                        |
| Nominal Size<br>(in.)<br>(W*H*D) | Separator     | Header    | Air Flow<br>(CFM)  | Face Velocity<br>(FPM) | Initial Resistance (in W.G) |                  |                                        |
|                                  |               |           |                    |                        | 99.95%<br>@MPPS             | 99.995%<br>@MPPS | Recommended<br>final resistance        |
| 12x24x3                          | Aluminum Foil | No Header | 235                | 118                    | 1.00                        | 1.12             | 2 - 2.5 times of<br>initial resistance |
| 24x24x3                          | Aluminum Foil | No Header | 471                | 118                    | 1.00                        | 1.12             |                                        |
| 12x24x6                          | Aluminum Foil | No Header | 324                | 197                    | 1.00                        | 1.12             |                                        |
| 24x24x6                          | Aluminum Foil | No Header | 689                | 197                    | 1.00                        | 1.12             |                                        |
| 12x24x9                          | Aluminum Foil | No Header | 500                | 305                    | 1.00                        | 1.12             |                                        |
| 24x24x9                          | Aluminum Foil | No Header | 1071               | 305                    | 1.00                        | 1.12             |                                        |
| 12x24x12                         | Aluminum Foil | No Header | 659                | 394                    | 1.00                        | 1.12             |                                        |
| 24x24x12                         | Aluminum Foil | No Header | 1413               | 394                    | 1.00                        | 1.12             |                                        |

- Performance Initial Resistance Tolerance: ±10%
- Example dimensions displayed; custom sizes available

# PERFORMANCE DATA

## Initial Resistance vs. Face Velocity

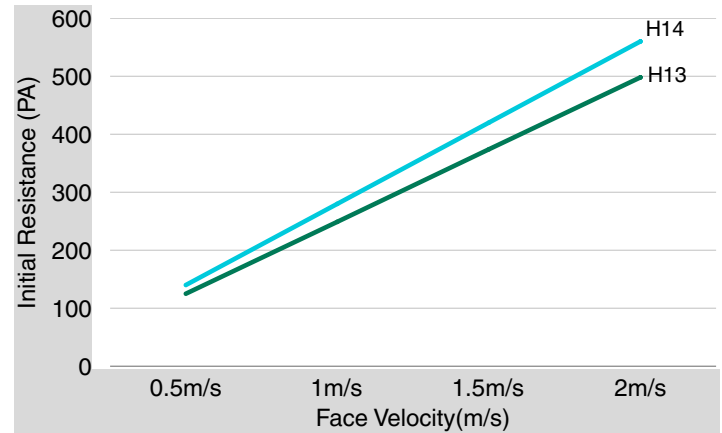
- H13(99.95% @MPPS)
- H14(99.95% @MPPS)



Product size: 610x610x80(mm)/24x24x3(inch)

## Initial Resistance vs. Face Velocity

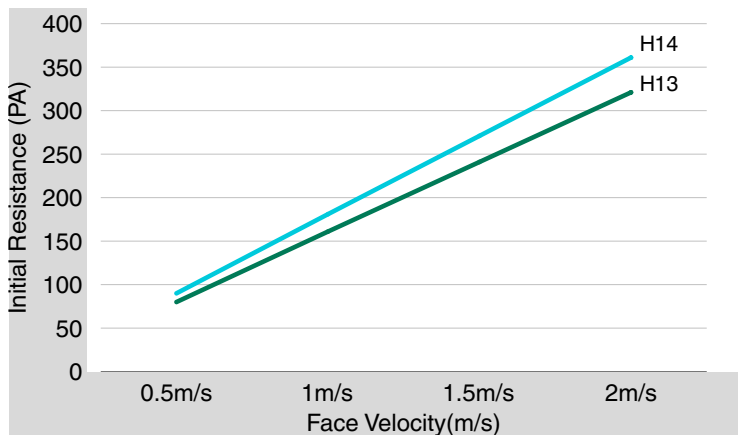
- H13(99.95% @MPPS)
- H14(99.95% @MPPS)



Product size: 610x610x150(mm)/24x24x6(inch)

## Initial Resistance vs. Face Velocity

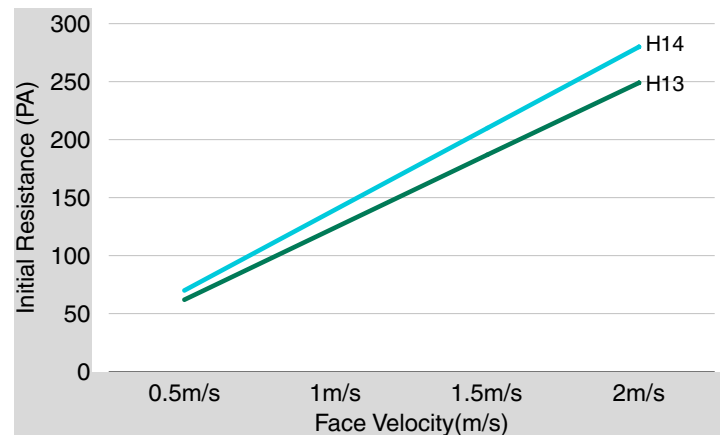
- H13(99.95% @MPPS)
- H14(99.95% @MPPS)



Product size: 610x610x220(mm)/24x24x9(inch)

## Initial Resistance vs. Face Velocity

- H13(99.95% @MPPS)
- H14(99.95% @MPPS)



Product size: 610x610x292(mm)/24x24x12(inch)

# PRODUCT PARAMETERS

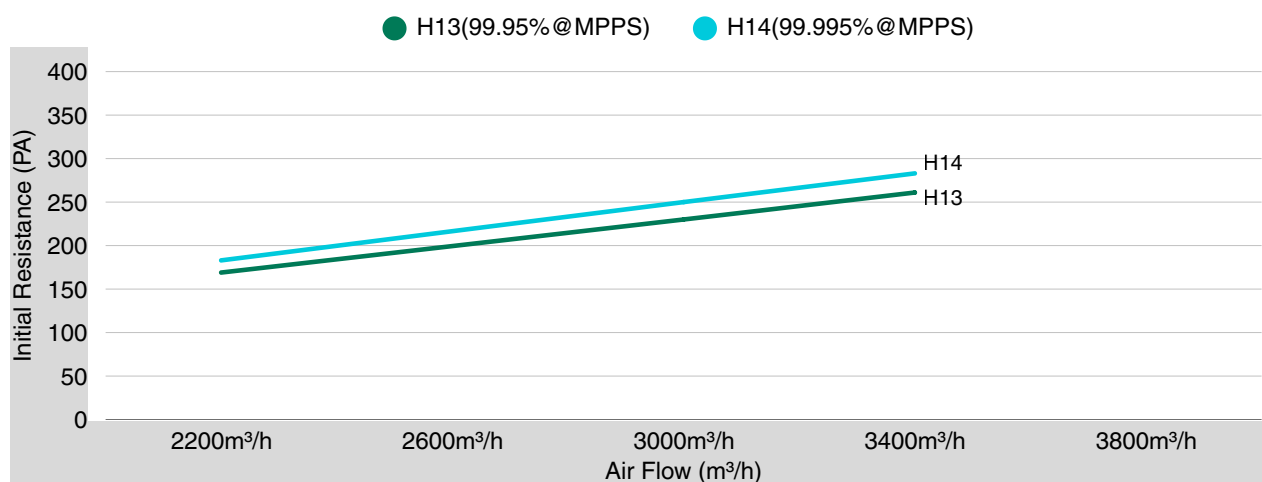
## ◀◀ Separator HEPA Filter- Premium Capacity ▶▶

| INTERNATIONAL STANDARD           |               |           |                    |                        |                             |                  |                                        |
|----------------------------------|---------------|-----------|--------------------|------------------------|-----------------------------|------------------|----------------------------------------|
| Actual Size (mm)<br>(W*H*D)      | Separator     | Header    | Air Flow<br>(m³/h) | Face Velocity<br>(m/s) | Initial Resistance (Pa)     |                  |                                        |
|                                  |               |           |                    |                        | H13                         | H14              | Recommended<br>final resistance        |
| 305x610x292                      | Aluminum Foil | No Header | 1400               | 2.5                    | 230                         | 250              | 2 - 2.5 times of<br>initial resistance |
| 610x305x292                      | Aluminum Foil | No Header | 1400               | 2.5                    | 230                         | 250              |                                        |
| 610x610x292                      | Aluminum Foil | No Header | 3000               | 2.5                    | 230                         | 250              |                                        |
| U.S STANDARD                     |               |           |                    |                        |                             |                  |                                        |
| Nominal Size<br>(in.)<br>(W*H*D) | Separator     | Header    | Air Flow<br>(CFM)  | Face Velocity<br>(FPM) | Initial Resistance (in W.G) |                  |                                        |
|                                  |               |           |                    |                        | 99.95%<br>@MPPS             | 99.995%<br>@MPPS | Recommended<br>final resistance        |
| 12x24x12                         | Aluminum Foil | No Header | 824                | 492                    | 0.92                        | 1                | 2 - 2.5 times of<br>initial resistance |
| 24x12x12                         | Aluminum Foil | No Header | 824                | 492                    | 0.92                        | 1                |                                        |
| 24x24x12                         | Aluminum Foil | No Header | 1766               | 492                    | 0.92                        | 1                |                                        |

- Performance Initial Resistance Tolerance:  $\pm 10\%$
- Example dimensions displayed; custom sizes available

## PERFORMANCE DATA

Initial Resistance vs. Air Flow  
( Face Velocity: 2.5m/s)



Product size: 610×610×292(mm)/24x24x12(inch)

# EFFICIENCY STANDARD

| Ashare MERV |                                                                    |         |          | ISO 16890: 2016                                           |         |                         |                          | EN      | EN779                                     |                                  |                                  | EN1822                                                  |  |  |  |
|-------------|--------------------------------------------------------------------|---------|----------|-----------------------------------------------------------|---------|-------------------------|--------------------------|---------|-------------------------------------------|----------------------------------|----------------------------------|---------------------------------------------------------|--|--|--|
|             | Composite Average Oarticle Size Efficiency (Em) % in Size Range Um |         |          | Average of initial and discharged efficiency Em=(Ei+Ed)/2 |         | Initial Efficiency (Ei) | Initial Arrestance (Am)  |         | Average Arrestance (Am) of Synthetic Dust | Average Efficiency (Em) at 0.4um | Minimum Efficiency (Em) at 0.4Um | Initial Efficiency (Ei) at MPPS (Typically 0.08-0.15um) |  |  |  |
|             | Range 1                                                            | Range 2 | Range 3  | ePM1%                                                     | ePM2.5% | ePM10%                  | Coarse                   |         | Test Final dP 250 Pa                      | Test final dP 450 Pa             |                                  |                                                         |  |  |  |
|             | 0.3-1.0                                                            | 1.0-3.0 | 3.0-10.0 | 0.3-1.0                                                   | 1.0-3.0 | 3.0-10.0                | ISO Fine Dust            |         | %                                         | %                                | %                                | %                                                       |  |  |  |
| 1           |                                                                    |         | Em<20    |                                                           |         |                         | Am<50<br>Final dP 200Pa  | G1      | 50<=Am<=65                                |                                  |                                  |                                                         |  |  |  |
| 2           |                                                                    |         | Em<20    |                                                           |         |                         |                          |         |                                           |                                  | G2                               | 65<=Am<=80                                              |  |  |  |
| 3           |                                                                    |         | Em<20    |                                                           |         |                         |                          |         |                                           |                                  |                                  |                                                         |  |  |  |
| 4           |                                                                    |         | Em<20    |                                                           |         |                         |                          |         |                                           |                                  |                                  |                                                         |  |  |  |
| 5           |                                                                    |         | Em<20    |                                                           |         |                         | Am>=50<br>Final dP 200Pa | G3      | 80<=Am<=90                                |                                  |                                  |                                                         |  |  |  |
| 6           |                                                                    |         | Em>=20   |                                                           |         |                         |                          |         |                                           |                                  |                                  |                                                         |  |  |  |
| 7           |                                                                    |         | Em>=50   |                                                           |         |                         |                          |         |                                           |                                  | G4                               | Am<=90                                                  |  |  |  |
| 8           |                                                                    | Em>=20  | Em>=70   |                                                           |         |                         |                          |         |                                           |                                  |                                  |                                                         |  |  |  |
| 9           |                                                                    | Em>=35  | Em>=75   |                                                           |         | Ei>50                   |                          | M5 (F5) |                                           | 40<=Em<=60                       |                                  |                                                         |  |  |  |
| 10          |                                                                    | Em>=50  | Em>=80   |                                                           |         |                         |                          |         |                                           |                                  |                                  |                                                         |  |  |  |
| 11          | Em>=20                                                             | Em>=65  | Em>=85   |                                                           | Em>=50  | Ei>70                   |                          | M6      |                                           | 60<=Em<=80                       |                                  |                                                         |  |  |  |
| 12          | Em>=35                                                             | Em>=80  | Em>=90   |                                                           |         |                         |                          |         |                                           |                                  |                                  |                                                         |  |  |  |
| 13          | Em>=50                                                             | Em>=85  | Em>=90   | Em>50                                                     | Em>65   | Ei>80                   |                          | F7      |                                           | 80<=Em<=90                       | Emin>=35                         |                                                         |  |  |  |
| 14          | Em>=75                                                             | Em>=90  | Em>=95   | Em>70                                                     | Em>80   | Ei>90                   |                          | F8      |                                           | 90<=Em<=95                       | Emin>=55                         |                                                         |  |  |  |
| 15          | Em>=85                                                             | Em>=90  | Em>=95   | Em>80                                                     |         |                         |                          | F9      |                                           | 95<=Em                           | Emin>=70                         |                                                         |  |  |  |
| 16          | Em>=95                                                             | Em>=95  | Em>=95   |                                                           |         |                         |                          | E10     |                                           |                                  |                                  | Ei>=85                                                  |  |  |  |
|             |                                                                    |         |          |                                                           |         |                         |                          | E11     |                                           |                                  |                                  | Ei>=95                                                  |  |  |  |
|             |                                                                    |         |          |                                                           |         |                         |                          | E12     |                                           |                                  |                                  | Ei>=99.5                                                |  |  |  |
| HEPA        | N/A                                                                | N/A     | N/A      | N/A                                                       | N/A     | N/A                     | N/A                      | H13     |                                           |                                  |                                  | Ei>=99.95                                               |  |  |  |
| H14         |                                                                    |         |          |                                                           |         |                         |                          |         |                                           |                                  | Ei>=99.995                       |                                                         |  |  |  |
| ULPA        |                                                                    |         |          |                                                           |         |                         |                          | U15     |                                           |                                  |                                  | Ei>=99.9995                                             |  |  |  |
|             |                                                                    |         |          |                                                           |         |                         |                          | U16     |                                           |                                  |                                  | Ei>=99.99995                                            |  |  |  |
|             |                                                                    |         |          |                                                           |         |                         |                          | U17     |                                           |                                  |                                  | Ei>=99.999995                                           |  |  |  |