

## Mini-pleated HEPA / ULPA Filter (AG-PTFE)



Amorair mini-pleated HEPA/ULPA filter utilizes special PTFE material, offering exceptional efficiency with ultra-low resistance, resulting in a 40% reduction in energy consumption. This filter exhibits strong resistance to environmental corrosion (acidic, alkaline, and organic substances) and possesses extremely low chemical gas emission characteristics (boron, sodium, potassium, silicon), making it suitable for use in extreme environments. It is ideal for stringent settings such as semiconductor chip manufacturing facilities, LCD electronics factories, and modular cleanrooms.

- Ultra Low Resistance
- High Efficiency
- Energy Saving
- Stable Performance
- Available for Customization
- 100% Scan Tested According To EN1822/ISO29463

## Specifications

|                        |                                                             |
|------------------------|-------------------------------------------------------------|
| <b>Frame Material</b>  | Galvanized Steel / Aluminum                                 |
| <b>Media</b>           | PTFE                                                        |
| <b>U.S. Efficiency</b> | 99.95%, 99.995%, 99.9995%, 99.99995%, 99.999995% @ MPPS     |
| <b>Euro Efficiency</b> | H13, H14, U15, U16, U17                                     |
| <b>Max Temperature</b> | 70 °C (158 °F)                                              |
| <b>Gasket</b>          | Optional                                                    |
| <b>Sealant</b>         | Polyurethane                                                |
| <b>Depth</b>           | 30mm (1.2") / 50mm (2") / 70mm (2.75"), custom upon request |

# PRODUCT PARAMETERS

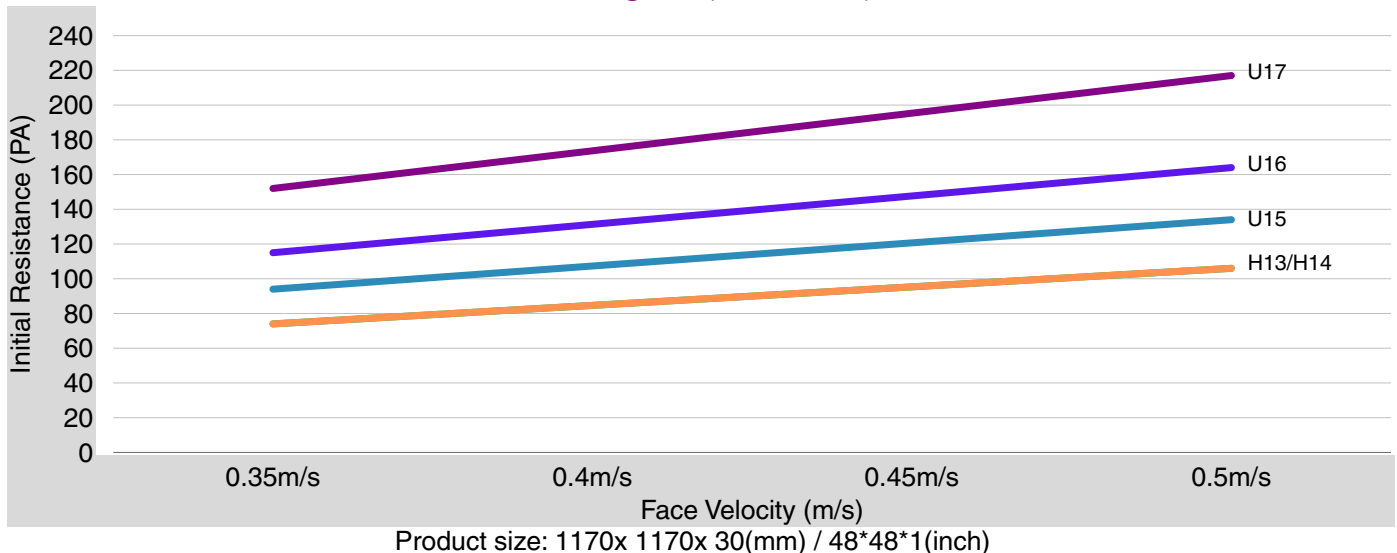
| INTERNATIONAL STANDARD        |                        |                             |                  |                   |                    |                     |
|-------------------------------|------------------------|-----------------------------|------------------|-------------------|--------------------|---------------------|
| Actual Size (mm)<br>W x H x D | Face Velocity<br>(m/s) | Initial Resistance (Pa)     |                  |                   |                    |                     |
|                               |                        | H13                         | H14              | U15               | U16                | U17                 |
| 570x570x30                    | 0.35                   | 74                          | 74               | 94                | 115                | 152                 |
| 570x1170x30                   | 0.35                   | 74                          | 74               | 94                | 115                | 152                 |
| 570x570x50                    | 0.45                   | 63                          | 63               | 81                | 99                 | 130                 |
| 570x1170x50                   | 0.45                   | 63                          | 63               | 81                | 99                 | 130                 |
| 570x570x70                    | 0.45                   | 38                          | 38               | 49                | 59                 | 78                  |
| 570x1170x70                   | 0.45                   | 38                          | 38               | 49                | 59                 | 78                  |
| U.S STANDARD                  |                        |                             |                  |                   |                    |                     |
| Nominal Size (in.)<br>(W*H*D) | Face Velocity<br>(FPM) | Initial Resistance (in W.G) |                  |                   |                    |                     |
|                               |                        | 99.95%<br>@MPPS             | 99.995%<br>@MPPS | 99.9995%<br>@MPPS | 99.99995%<br>@MPPS | 99.999995%<br>@MPPS |
| 24*24*1                       | 69                     | 0.30                        | 0.30             | 0.38              | 0.46               | 0.61                |
| 24*48*1                       | 69                     | 0.30                        | 0.30             | 0.38              | 0.46               | 0.61                |
| 24*24*2                       | 89                     | 0.25                        | 0.25             | 0.32              | 0.40               | 0.52                |
| 24*48*2                       | 89                     | 0.25                        | 0.25             | 0.32              | 0.40               | 0.52                |
| 24*24*3                       | 89                     | 0.15                        | 0.15             | 0.20              | 0.24               | 0.31                |
| 24*48*3                       | 89                     | 0.15                        | 0.15             | 0.20              | 0.24               | 0.31                |

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

## PERFORMANCE DATA

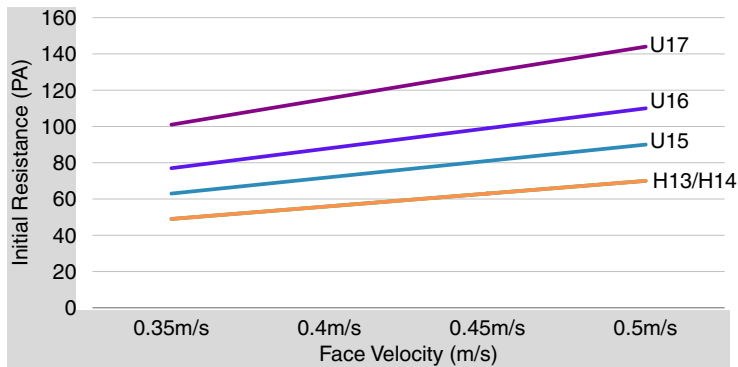
### Initial Resistance vs. Filter Face Velocity

- H13(99.95%) 
 ● H14(99.995%) 
 ● U15(99.9995%) 
 ● U16(99.99995%) 
 ● U17(99.999995%)



Initial Resistance vs. Filter Face Velocity

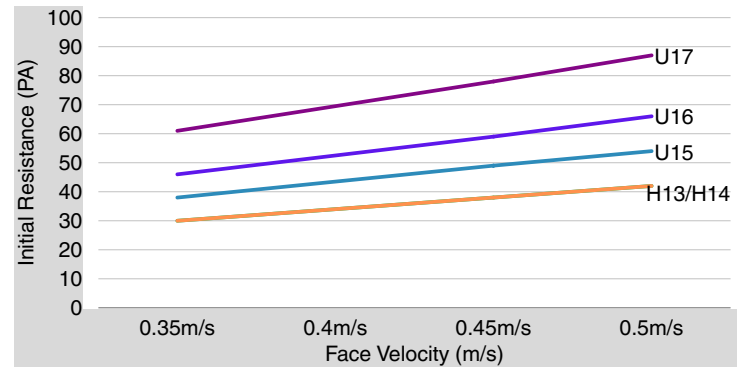
● H13(99.95%) ● H14(99.995%) ● U15(99.9995%)  
● U16(99.99995%) ● U17(99.999995%)



Product size: 1170x 1170x 50(mm) / 48\*48\*2(inch)

Initial Resistance vs. Filter Face Velocity

● H13(99.95%) ● H14(99.995%) ● U15(99.9995%)  
● U16(99.99995%) ● U17(99.999995%)



Product size: 1170x 1170x 70(mm) / 48\*48\*3(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    |                                                           |         |                         |                          |         |                                           |                                  |                                  |                                                         |  |  |  |
| 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                                           |  |  |  |