AmericanAirFilter

PerfectPleat® ULTRA

Extended Surface, Pleated Filter with Antimicrobial MERV 8

- Mechanical efficiency does not rely on electret charge technology
- Patented media, filter design, and manufacturing process. Covered under one or more of the following patents: US 6398839 B2; US 6254653 B1; US 6159318; US 6165242; US 6387140 B1 (1" model only)
- · Premium performance and construction
- · Self-supporting media; no wire supporting grid
- Tested in accordance with ASHRAE Standard 52.2
- · Incorporates antimicrobial
- Available in 1", 2" and *4" models

PerfectPleat® Filter with Antimicrobial

AAF's industry leading PerfectPleat filter, with uniform pleat spacing and patented DuraFlex® media, is designed for strength. Uniform size virgin fibers assembled in closely controlled blends give it remarkably consistent performance. Additionally, AAF has taken MERV 8 DuraFlex media and incorporated antimicrobial. The result is the PerfectPleat ULTRA filter.

MERV 8 performance means better than 70% initial efficiency on 3.0-10.0 micron particles (the PerfectPleat ULTRA filter becomes much more efficient after the first dust loading). DuraFlex media employs principles of mechanical filtration so that efficiency increases as the filter does its job. DuraFlex media is not enhanced by an electret charge that dissipates over time reducing media efficiency, in some instances significantly.

Antimicrobial is applied to preserve the integrity of the media throughout the filter's useful life by inhibiting microbial growth.

Applications

The PerfectPleat ULTRA filter is ideal for applications where pleated filters are currently in use and higher efficiencies are desired or required. It is also suited to high moisture conditions where bacterial growth may be likely to occur on air filters.

Every PerfectPleat ULTRA filter offers superior durability and performance when properly installed and maintained.



DuraFlex® Media — Patented Media Design

Uniform size virgin fibers are assembled in closely controlled blends to create a media that is both self-supporting and remarkably consistent in performance. When pleated, DuraFlex media will hold its shape without the wire support characteristic of conventional pleated filters. That means no potential for the formation of rust and safer handling — no nicks or cuts for the installer or handler.

With the superior resiliency of DuraFlex media and no need for wire support, the PerfectPleat ULTRA filter can sustain significant abuse and maintain its shape and pleat spacing. The absence of the wire also makes the filter totally incinerable, which simplifies disposal. The PerfectPleat ULTRA filter meets or exceeds all current expectations for service life.

Heavy Duty Frame

The perimeter frame of the PerfectPleat ULTRA filter is constructed from the highest wet-strength, 28 pt. beverage carrier board available and is securely bonded to the media pack. The 28 pt. thickness improves filter strength and helps resist damage.

Patented tri-bar pleat stabilizers are bonded to the media to ensure uniform pleat spacing and provide additional strength. Three sets of pleat stabilizers are bonded to the air-leaving side of the filter. On the air entering side, three support straps enhance the PerfectPleat ULTRA filter's strength and durability. The pleat straps and the pleat stabilizers ensure stability against turbulent airflow and provide excellent lateral stability for installation in side-access systems.

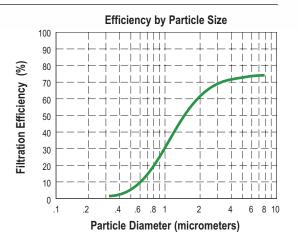
^{*}See brochure AFP-1-206 for 4" model.

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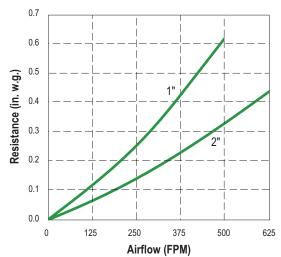
PerfectPleat® ULTRA

<u>Product Information — Standard Sizes</u>

| Nominal Sizes* (Inches) | Actual Sizes (Inches) | Rate | Pleats Per Filter | | |
|-------------------------|-----------------------|---------|----------------------|---------|----|
| (W x H x D) | (W x H x D) | 300 FPM | (SCFM) 500 FPM | 625 FPM | 1" |
| 10 x 10 x 1 | 9½ x 9½ x ¾ | 200 | 350 | | 11 |
| 10 x 20 x 1 | 9½ x 19½ x ¾ | 400 | 700 | | 11 |
| 12 x 12 x 1 | 11½ x 11½ x ¾ | 300 | 500 | | 14 |
| 12 x 20 x 1 | 11 ½ x 19½ x ¾ | 500 | 850 | | 14 |
| 12 x 24 x 1 | 11% x 23% x ¾ | 600 | 1000 | | 14 |
| 14 x 20 x 1 | 13½ x 19½ x ¾ | 600 | 1000 | | 16 |
| 14 x 25 x 1 | 13½ x 24½ x ¾ | 750 | 1200 | | 16 |
| 15 x 20 x 1 | 14½ x 19½ x ¾ | 650 | 1050 | | 17 |
| 16 x 16 x 1 | 15½ x 15½ x ¾ | 550 | 900 | | 19 |
| 16 x 20 x 1 | 15½ x 19½ x ¾ | 650 | 1100 | | 19 |
| 16 x 25 x 1 | 15½ x 24½ x ¾ | 850 | 1400 | | 19 |
| 18 x 20 x 1 | 17½ x 19½ x ¾ | 750 | 1250 | | 21 |
| 18 x 24 x 1 | 17% x 23% x ¾ | 900 | 1500 | | 21 |
| 18 x 25 x 1 | 17½ x 24½ x ¾ | 950 | 1550 | | 21 |
| 20 x 20 x 1 | 19½ x 19½ x ¾ | 850 | 1400 | | 24 |
| 20 x 25 x 1 | 19½ x 24½ x ¾ | 1050 | 1750 | | 24 |
| 24 x 24 x 1 | 23% x 23% x ¾ | 1200 | 2000 | | 29 |
| 25 x 25 x 1 | 24½ x 24½ x ¾ | 1300 | 2200 | | 30 |
| | | | | | 2" |
| 10 x 20 x 2 | 9½ x 19½ x 1¾ | 400 | 700 | 850 | 11 |
| 12 x 20 x 2 | 11½ x 19½ x 1¾ | 500 | 850 | 1050 | 14 |
| 12 x 24 x 2 | 11 % x 23% x 1% | 600 | 1000 | 1250 | 14 |
| 14 x 25 x 2 | 13½ x 24½ x 1¾ | 750 | 1200 | 1500 | 16 |
| 15 x 20 x 2 | 14½ x 19½ x 1¾ | 650 | 1050 | 1300 | 17 |
| 15 x 25 x 2 | 14½ x 24½ x 1¾ | 800 | 1300 | 1650 | 17 |
| 16 x 16 x 2 | 15½ x 15½ x 1¾ | 550 | 900 | 1100 | 19 |
| 16 x 20 x 2 | 15½ x 19½ x 1¾ | 650 | 1100 | 1400 | 19 |
| 16 x 24 x 2 | 15% x 23% x 1¾ | 800 | 1350 | 1650 | 19 |
| 16 x 25 x 2 | 15½ x 24½ x 1¾ | 850 | 1400 | 1750 | 19 |
| 18 x 25 x 2 | 17½ x 24½ x 1¾ | 950 | 1550 | 1950 | 21 |
| 18 x 24 x 2 | 17% x 23% x 1% | 900 | 1500 | 1900 | 21 |
| 20 x 20 x 2 | 19½ x 19½ x 1¾ | 850 | 1400 | 1750 | 24 |
| 20 x 24 x 2 | 19% x 23% x 1% | 1000 | 1650 | 2100 | 24 |
| 20 x 25 x 2 | 19½ x 24½ x 1¾ | 1050 | 1750 | 2150 | 24 |
| 24 x 24 x 2 | 23% x 23% x 1¾ | 1200 | 2000 | 2500 | 28 |
| 25 x 25 x 2 | 24½ x 24½ x 1¾ | 1300 | 2150 | 2700 | 30 |



Initial Resistance vs. Filter Face Velocity



PerfectPleat ULTRA filters are classified UL Class 2. Testing was performed according to UL Standard 900 and CAN 4-S111.

Performance Data

| Filter | Pleats Per Lineal Foot | Rated Initia 300 FPM | l Resistan 500 FPM | ce (In. W.G.) 625 FPM | Recommended Final Resistance (in. w. g.) | ASHRAE 52.2 MERV | Continuous Operating Temperature Limits |
|-----------------------|---------------------------|-------------------------|-----------------------|--------------------------|------------------------------------------|---------------------|--------------------------------------------|
| 1" PerfectPleat ULTRA | 15 | .31 | .62 | | 1.0 | 8 | 150°F / 66°C |
| 2" PerfectPleat ULTRA | 15 | .16 | .33 | .43 | 1.0 | 8 | 150°F / 66°C |

See Brochure AFP-1-206 for 4" model.

PerfectPleat® and DuraFlex® are registered trademarks of AAF-McQuay Inc. in the U.S. and Canada.



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AAF has a policy of continuous product research and improvement and reserves the right to change design and specifications without notice.

^{*1} in. filters are constructed the same as 2 in. filters except they have straps on both air entering and air leaving sides.