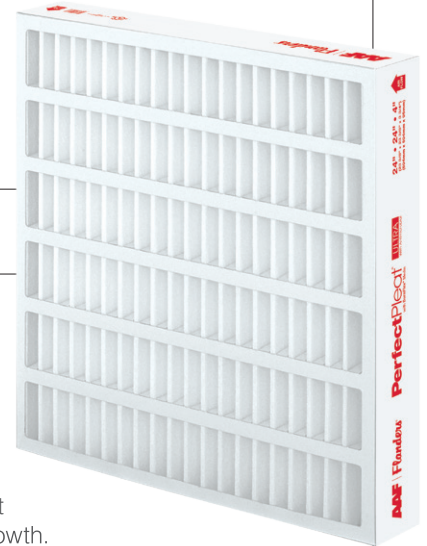# PerfectPleat® ULTRA
(MERV 8 with Antimicrobial)

EXTENDED SURFACE PLEATED PANEL FILTERS

- Highest performing self-supported pleated filter in the world

- Mechanical efficiency – does not rely on electret charge technology

- Self-supporting DuraFlex® media made from virgin fiber – no wire support needed

- Consistent media with controlled fiber size and blend

- Incorporates antimicrobial

- Available in 1″, 2″ and 4″ models

- Environmentally friendly – no dies, no metal, fully incinerable

- 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)

Media Pack Sealant

Media Pack Structurally Bonded with Hot Melt

Pleat Stabilizer Bar

Pleat Support Strap

DuraFlex® Self-Supporting Media

Media Pack Sealant

PerfectPleat® ULTRA 2″ Filter Construction

The PerfectPleat ULTRA filter is designed to consistently increase efficiency throughout the service life of the filter. The PerfectPleat ULTRA filter has approximately 25% more media than our standard capacity filter and also incorporates an antimicrobial. The antimicrobial is applied to the media to preserve the integrity of the media throughout the filter's useful life by inhibiting microbial growth. PerfectPleat ULTRA filters have an initial MERV 8 rating respectively, but the efficiency increases significantly when dust holding begins. PerfectPleat ULTRA filters have distinctive self-supporting characteristics that allow a pleating pattern, which promotes airflow and maximizes Dust Holding Capacity (DHC). 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.
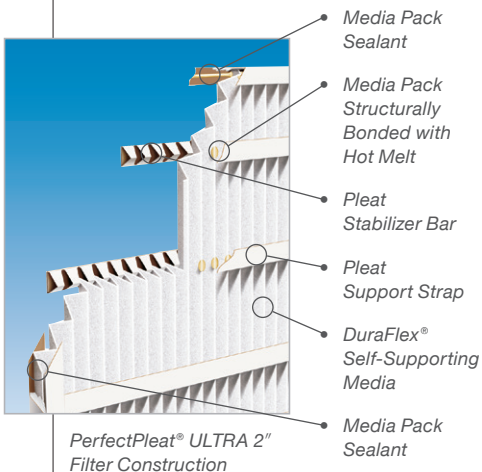
Superior Design and Construction

The perimeter frame is constructed from the highest wet-strength 28 pt. beverage carrier board, securely bonded to the media pack. The 1″ model employs three supporting straps on the air entering and air leaving sides of the filter to control pleat spacing and support the media pack in the perimeter frame.

Support straps on the air entering side are used in combination with uniquely designed pleat stabilizers on the air-leaving side of the 2″ model to provide additional strength. The support straps and pleat stabilizers ensure integrity against turbulent airflow. The 2″ filter resists crushing and abuse and provides excellent lateral stability for installation in side-access systems.

The 4″ model utilizes a two piece die cut frame with integral pleat spacers on the air leaving side. Pleat spacing is controlled by straps bonded to the air entering side and the multiple rows of pleat spacers on the air leaving side. The pleat spacers also ensure the pleats remain open during use, maximizing filter life.

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 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. With the superior resiliency of DuraFlex media and no need for wire support, PerfectPleat ULTRA filters can sustain significant abuse and maintain their shape and pleat spacing. The absence of wire also makes the filter totally incinerable, which can simplify disposal.

AAF®
INTERNATIONAL
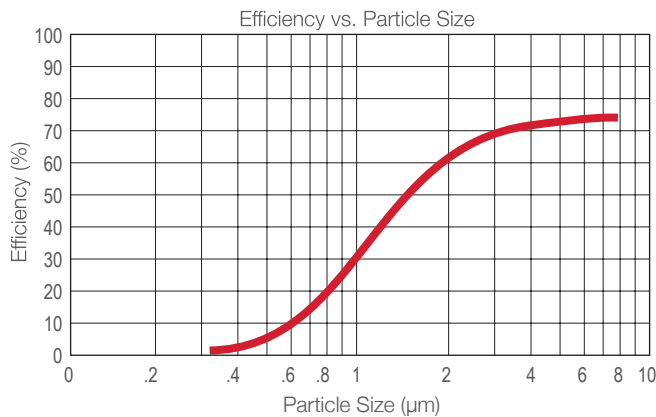a member of DAIKIN group

PerfectPleat® ULTRA Filters

Performance Data

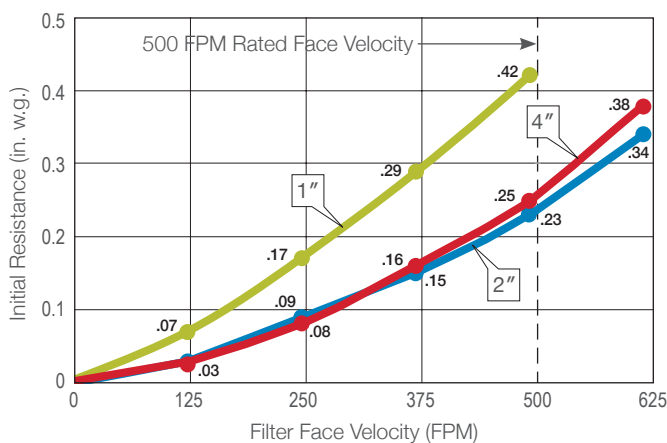| Filter	Pleats Per Linear Foot	Rated Initial Resistance (in. w.g.)			Recommended Final Resistance (in. w.g.)	ASHRAE 52.2 MERV	Continuous Operating Temperature Limits
		300 FPM	500 FPM	625 FPM			
1″ PerfectPleat ULTRA	15	.23	.42	–	1.0	8	150°F (66°C)
2″ PerfectPleat ULTRA	15	.12	.23	.34	1.0	8	150°F (66°C)
4″ PerfectPleat ULTRA	11	.12	.25	.38	1.0	8	200°F (93°C)

All performance data based on ASHRAE Standard 52.2. Performance tolerance conforms to Section 6.4 of ANSI/AHRI Standard 850-2013.

Underwriters Laboratories Classification – *PerfectPleat ULTRA filters are UL Classified. Testing was performed according to UL Standard 900.*

Composite Minimum Efficiency Curve

Efficiency vs. Particle Size

Initial Resistance vs. Filter Face Velocity

Energy savings may be realized by operating the PerfectPleat ULTRA filters to a lower final resistance. Contact your local AAF representative for a Total Cost of Ownership analysis for your specific application.

PerfectPleat® and DuraFlex® are registered trademarks of AAF International in the U.S. and other countries.

Product Information – Standard Sizes

Nominal Sizes (Inches) (W x H x D)	Actual Sizes (Inches) (W x H x D)	Rated Airflow (SCFM)			Pleats Per Filter
		300 FPM	500 FPM	625 FPM	
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	11½ x 19½ x ¾	500	850	–	14
12 x 24 x 1	11⅜ x 23⅜ 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	17⅜ x 23⅜ 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	23⅜ x 23⅜ x ¾	1200	2000	–	29
25 x 25 x 1	24½ x 24½ x ¾	1300	2200	–	30
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	11⅜ x 23⅜ x 1¾	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	15⅜ x 23⅜ x 1¾	800	1350	1650	19
16 x 25 x 2	15½ x 24½ x 1¾	850	1400	1750	19
18 x 24 x 2	17⅜ x 23⅜ x 1¾	900	1500	1900	21
18 x 25 x 2	17½ x 24½ x 1¾	950	1550	1950	21
20 x 20 x 2	19½ x 19½ x 1¾	850	1400	1750	24
20 x 24 x 2	19⅜ x 23⅜ x 1¾	1000	1650	2100	24
20 x 25 x 2	19½ x 24½ x 1¾	1050	1750	2150	24
24 x 24 x 2	23⅜ x 23⅜ x 1¾	1200	2000	2500	29
25 x 25 x 2	24½ x 24½ x 1¾	1300	2150	2700	30
12 x 24 x 4	11⅜ x 23⅜ x 3¾	600	1000	1250	10
16 x 20 x 4	15⅜ x 19⅜ x 3¾	650	1100	1400	13
16 x 25 x 4	15⅜ x 24⅜ x 3¾	850	1400	1750	13
18 x 24 x 4	17⅜ x 23⅜ x 3¾	900	1500	1875	15
20 x 20 x 4	19⅜ x 19⅜ x 3¾	850	1400	1750	17
20 x 25 x 4	19⅜ x 24⅜ x 3¾	1050	1750	2150	17
24 x 20 x 4	23⅜ x 19⅜ x 3¾	1000	1650	2100	17
24 x 24 x 4	23⅜ x 23⅜ x 3¾	1200	2000	2500	21
25 x 29 x 4	24⅜ x 28⅜ x 3¾	1500	2500	3150	26