

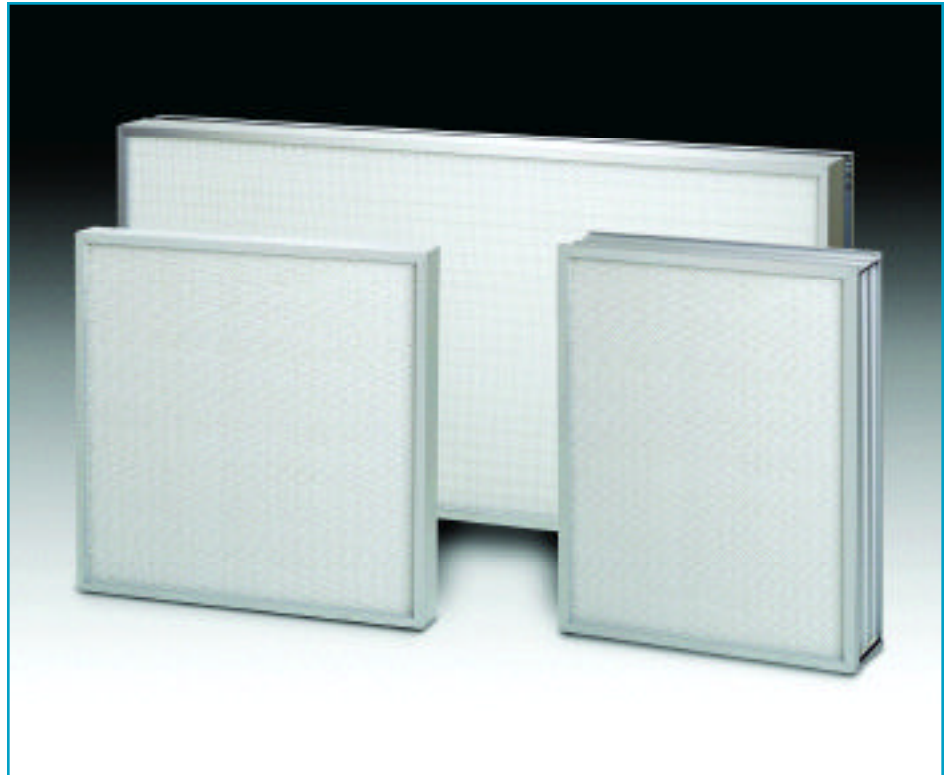
FILTRATION GROUP

ULTRASTAR CLEANROOM PANELS



CLEANROOM FILTRATION

- 99.99% (HEPA) minimum removal on 0.3µm efficiency
- 99.9995% (ULPA) minimum removal on 0.12µm efficiency
- 2.0" and 2.5" mini-pleat media packs
- Anodized extruded aluminum 3.06" and 5.88" frame
- All filters are subject to an efficiency test and a probe scan in accordance with IES-RP-CC-001.3



DESCRIPTION

The UltraStar Cleanroom Panels use mini-pleated wet laid glass media with efficiency of 99.99% (HEPA) on 0.3µm particle size or 99.9995% (ULPA) on 0.12µm particle size. Designed for easy installation and longer service life. The media pack is available in a 2.0" (51mm) and a 2.5" (63mm) version with a frame depth of 3.06" or 5.88".

BENEFITS

- Low pressure drop design reduces energy consumption
- Low profile design allows for installations with minimal overhead space

- White painted screen protects the media pack while providing an attractive finished appearance

APPLICATIONS

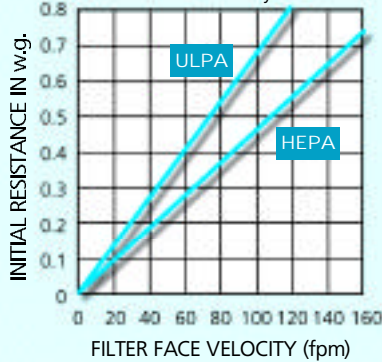
These filters are designed to optimize performance in filtration applications for the pharmaceutical, medical, semiconductor, microelectronic, biotechnology mini-environment, bio-safety cabinets and photographic industries as well as for surgical rooms in hospitals.



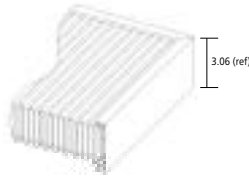
FEATURES	BENEFITS
• Patented (US Patent 4,963,171) manufacturing technology allows potting material to completely encapsulate pleats on all four sides	Guaranteed Seal
• Frame corners secured with corner clips and urethane seal	Leak Proof
• Maximized media content for lower pressure drop and extended service life	Lower Energy Cost
• 70% open face screen keeps the high performance of the media intact	Low Pressure Drop
• Protective screen is offset from pleat tips to eliminate wear due to vibration, installation and handling	No Media Damage
• Aluminum frames reduce weight and need for structural support	Easy Installation, Light Weight

2.0" MEDIA PACK

Initial Resistance vs. Face Velocity



Note: This graph represents a typical rating. The inside face dimension (not including filter frame) is used to calculate resistance. 3 1/16" filters are tested at 100 fpm at the factory. Recommended service resistance is approximately two times the initial resistance at the factory test flow rate.
 Filter Face Velocity (fpm) = $\frac{\text{Rated Flow [cu ft per min]} \times 144}{(\text{Height of Filter [in]} - 1.24") \times (\text{Width of Filter [in]} - 1.24")}$

3.06" Frame

**ULTRASTAR CLEANROOM PANEL—
3.06" SMOOTH FRAME AND 2.0" MEDIA PACK**

PART NUMBER*	EFFICIENCY % (min)	SIZE (in.) (W x L x D)	~SHIPPING WEIGHT (lbs.)
40669	99.99	23.62 x 23.62 x 3.06	9
40711	99.99	23.62 x 35.62 x 3.06	12
40670	99.99	23.62 x 47.62 x 3.06	15
40671	99.9995	23.62 x 23.62 x 3.06	9
40712	99.9995	23.62 x 35.62 x 3.06	12
40672	99.9995	23.62 x 47.62 x 3.06	15

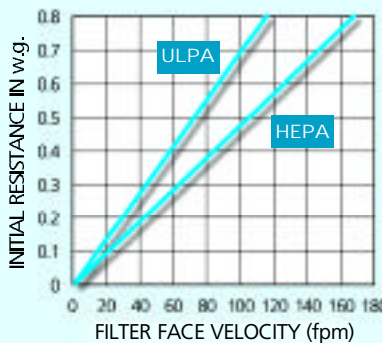
5.88" Frame

**ULTRASTAR CLEANROOM PANEL—
5.88" FRAME AND 2.5" MEDIA PACK**

PART NUMBER*	EFFICIENCY % (min)	SIZE (in.) (W x L x D)	~SHIPPING WEIGHT (lbs.)
40653	99.99	23.62 x 23.62 x 5.88	11
40654	99.99	23.62 x 47.62 x 5.88	20
40655	99.9995	23.62 x 23.62 x 5.88	9
40656	99.9995	23.62 x 47.62 x 5.88	15

2.5" MEDIA PACK

Initial Resistance vs. Face Velocity



Note: This graph represents a typical rating. The inside face dimension (not including filter frame) is used to calculate resistance. Filters are tested at 100 fpm at the factory. Recommended service resistance is approximately two times the initial resistance at the factory test flow rate.
 Filter Face Velocity (fpm) = $\frac{\text{Rated Flow [cu ft per min]} \times 144}{(\text{Height of Filter [in]} - 1.24") \times (\text{Width of Filter [in]} - 1.24")}$

3.06" C-Channel Frame

**ULTRASTAR CLEANROOM PANEL—
3.06" C-CHANNEL FRAME AND 2.5" MEDIA PACK**

PART NUMBER*	EFFICIENCY % (min)	SIZE (in.) (W x L x D)	~SHIPPING WEIGHT (lbs.)
22288	99.99	23.62 x 23.62 x 3.06	9
22289	99.99	23.62 x 47.62 x 3.06	15
22293	99.9995	23.62 x 23.62 x 3.06	9
22294	99.9995	23.62 x 47.62 x 3.06	15

*Painted (white) Downstream Screen—Standard
 Contact Customer Service for additional sizes and information.

AVAILABLE OPTIONS

- Downstream gasket
- Divider with test port
- Stainless steel or anodized aluminum downstream screen
- Sheet rock adapter

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