



Microclass GSR
Gel Seal
Replaceable Filter
Ducted Hood

Microclass GSR Gel Seal Replaceable Filter Ducted Hood

FEATURES

- Aluminum or stainless steel construction
- Available in two profiles—12" & 9" deep
- Available with choice of perimeter flange
- Inlet collar—8", 10" or 12"
- Distribution plate
- Protective grille
- Static pressure port
- Knife edge to accommodate gel seal HEPA

OPTIONS

- Removable stainless steel perimeter trim
- Foil back insulation
- Hanging tabs
- Horizontal flow
- Two inch extended stainless steel grille
- Aerosol injection system
- Heavy duty butterfly or low pressure drop damper
- Side inlet
- Non-standard depth



Microclass GSR gel seal replaceable ducted hood is designed for applications where easy, bypass-free filter change is required—such as in the biotech and pharmaceutical industries.

Microclass GSR is constructed of 0.63" aluminum or 16 gauge stainless steel as an option. All seams are welded and sealed with silicone caulking to prevent air leakage. For further assurance, each hood is pressure tested at 4.0" w.g. to ensure there is no leakage.

The Microclass GSR hood comes with a choice of perimeter flanges that include:

- An integral $\frac{5}{8}$ " perimeter flange constructed of the same material as the hood and designed to fit in a 1 $\frac{1}{2}$ " gasketed tee-grid system.
- A separate $\frac{5}{8}$ " perimeter flange/knife-edge assembly that is fabricated of Type 304



stainless steel. It is riveted and sealed inside the hood, and designed to fit in a 1 $\frac{1}{2}$ " gasketed tee-grid system.

- A separate $\frac{5}{8}$ " or optional 1 $\frac{1}{2}$ " perimeter flange assembly that is fabricated of Type 304 stainless steel. The installing contractor rivets and seals the assembly into the hood, and seals the perimeter of the flange to the gypsum or hardboard ceiling.

The Microclass GSR hood comes with either an 8", 10" or 12" inlet collar that is fabricated from either 0.040" aluminum (for an aluminum hood) or 20 gauge 304 stainless steel (for stainless steel hoods).

The inlet collar is ribbed in order to easily and securely connect the flex duct. The inlet collar has a butterfly damper (standard) that is adjusted from the room side through an access port in the hood. Other damper styles are available.

Microclass GSR Performance for Cleanroom Applications



Microclass HEPA & ULPA media pack



Microclass GSR hood with the optional aerosol injection system



Microclass GSR with the optional foil back insulation & hanging tabs

CONSTRUCTION

The Microclass GSR hood comes supplied with a protective grille fabricated of 22 gauge 304 stainless steel, perforated with 40% open area. The protective grille can either be flush mounted or extended two inches below the downstream side of the hood.

A static pressure port for measuring the pressure drop across the filter and for sampling the upstream test challenge concentration is also supplied.

Microclass GSR has a knife edge on the downstream side to penetrate and seal into the gel filled channel, located on the downstream side of the filter. The filter is held in place by four retainers in the hood, allowing for easy replacement from the room side.

The Microclass GSR hood comes as standard with a perforated aluminum distribution plate on the downstream side of the inlet collar to distribute the air to the filter.

Microclass HEPA and ULPA panel filters are available in a variety of media pack depths, efficiencies, test methods, flow rates and pressure drops to meet your application needs. Please refer to the Microclass HEPA/ULPA panel technical bulletin for more detailed information on filter construction and performance.

OPTIONAL EQUIPMENT

The Microclass GSR hood comes with an optional aerosol injection system to test the filters for leaks. The injection system has an injection port located in the knife edge of the hood that releases the challenge aerosol on the upstream side of a solid distribution plate. This allows for a convenient room side injection and even distribution of the test challenge.

Microclass GSR is also available with a two inch thick, foil back insulation. The insulation is installed on the exterior of either the top, or top and sides of the hood to reduce thermal loss.

The hood can also be supplied with optional hanging tabs mounted on each corner. The tabs are fabricated aluminum.

Microclass GSR

Technical Specifications

TECHNICAL DATA

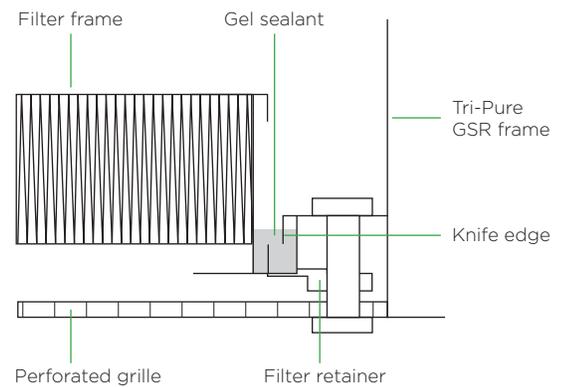
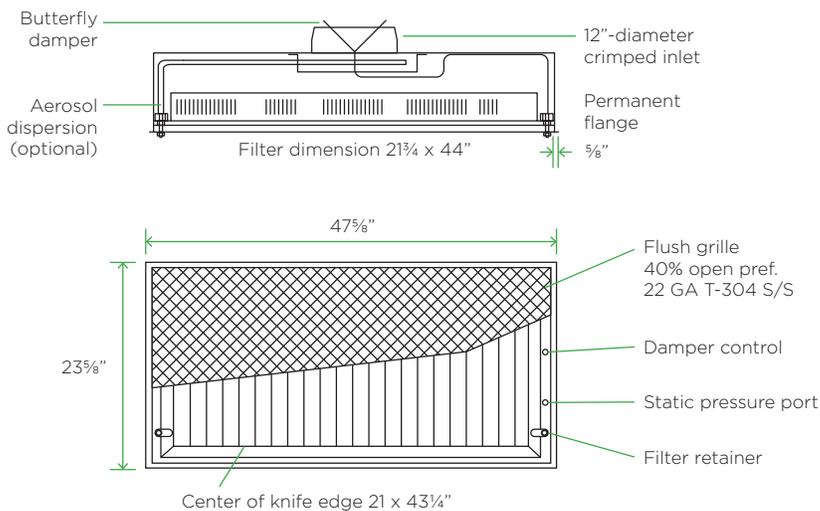
Length	Width	Profile Depth		Description
		Thin*	Standard	
23 ⁵ / ₈ "	23 ⁵ / ₈ "	9"	12"	5 ⁵ / ₈ " Permanent perimeter flange
23 ⁵ / ₈ "	47 ⁵ / ₈ "	9"	12"	5 ⁵ / ₈ " Permanent perimeter flange
25 ⁵ / ₈ "	25 ³ / ₈ "	9"	12"	1 ¹ / ₂ " Removable trim or permanent
25 ⁵ / ₈ "	49 ³ / ₈ "	9"	12"	1 ¹ / ₂ " Removable trim or permanent

* The 9" deep profile is only compatible with a 53mm filter pack.



Profile view of the Microclass GSR gel seal replaceable hood

MICROCLASS GSR DRAWINGS



MANN+HUMMEL is committed to continual product development – all descriptions, specifications and performance data are subject to change without notice. MANN+HUMMEL products are manufactured to exacting criteria – there can be a ±5% variance in filter performance.

LOCAL REPRESENTATIVE

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