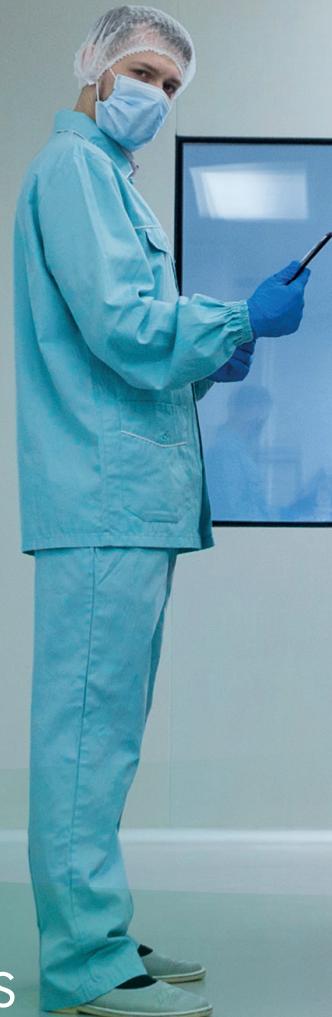
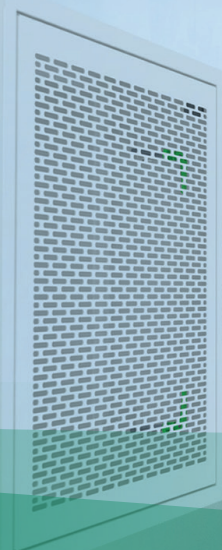


CLEANSEAL

A family of supply and exhaust
air HEPA housings for controlled
environments



Clean air solutions

CLEANSEAL: RELIABLE AND VERSATILE TERMINAL HEPA FILTER HOUSINGS

CleanSeal is a range of state of the art filter housing solutions specially developed for life science, healthcare and clean room facilities. The CleanSeal range of housings are characterised as being easy to install, easy to handle and easy to maintain. The CleanSeal offers easy access with maximum safety through its fully welded design, which also reduces the risk of leakages. The CleanSeal offers economic and environmental benefits, as the housings are equipped to handle Camfils most energy efficient panel HEPA filters. The new and updated CleanSeal family offers a complete range of HEPA housings for both supply and exhaust air applications that can be utilised in both ceilings and walls. The CleanSeal can be complemented by custom adaptations to fit your clean room environment.

PROVEN QUALITY AND PERFORMANCE

Every HEPA filter is individually tested and comes with his individual test certificate attached. But what about the housings? With Camfil, what is on the box – is in the box. Features and performance values are backed up by lab test reports and production quality assurance.



PRODUCTION QUALITY

The CleanSeal goes through many dimensional, geometrical and functional checks according to a clear, product-specific protocol. This ensures that you have full traceability for every housing installed in your controlled environment.



CORROSION PROTECTION

Double layer powder coat for enhanced corrosion protection against decontamination agents commonly used in life science and clean process environments. For environments with high condensation risk, stainless steel versions of Cleanseal are available.



PRODUCT DNA

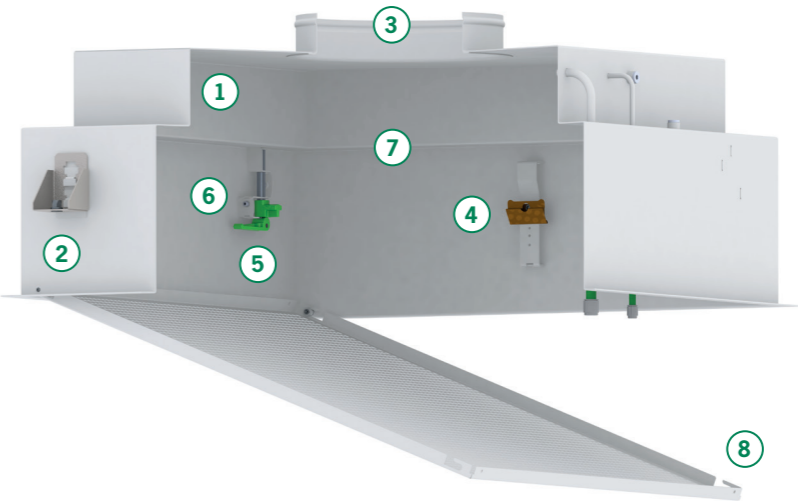
The CleanSeal name is a promise of consistent product DNA across the scope of base versions as well as for available options. Every CleanSeal housing will share all the unique features associated with the CleanSeal range, to make keeping your air clean that much easier.



TRANSPORT PROTECTION

The CleanSeal is packaged for efficient transport protection against unpleasant last-minute surprises. Our stringent quality checks ensure the CleanSeal arrives with you in a condition that is ready for installation and operation.

CLEANSEAL HOUSING



1. STRONG, FULLY WELDED CONSTRUCTION

The housing body, including a full suite of measurement ports, is fully welded to ensure reliable performance and absence of leaks over the full lifetime.

2. UNIVERSAL MOUNTING SYSTEM

The housings supports are adapted for both suspended installation and compression mounting on a panel.

3. FLEXIBLE AIR HOOKUP

Spigots are designed for flexible, multi-purpose hookup with different ducting systems.

4. FILTER RETAINER PRE-POSITIONING SYSTEM

Allows the filter to be held in place during installation, reducing the need for additional installation assistance.

5. TOOLLESS FILTER CLAMPING

For ease of installation and maintenance the filter can be installed without any tools.

6. BUILT-IN FILTER SCALING OPTION

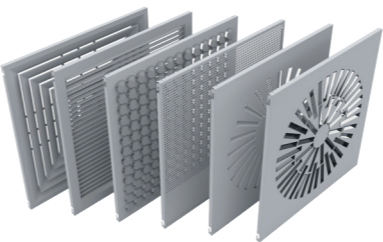
CleanSeal has been designed to handle all Camfil Megalam filter sizes (MG/MD/MX). This ensures that adaptable filter configurations are available as cleanroom requirements evolve.

7. AVAILABLE FOR PU AND GEL GASKETS

CleanSeal versions allow customer to chose between PU or Camfil GEL gaskets.

8. INNOVATIVE QUICK GRID FASTENER

Immediate access to filter and control ports thanks to a unique fastener device and hinged diffusion plate. Open it only with a badge or a "credit" card.



LARGE CHOICE OF FRONT PLATES

Front plates for ceiling housings are fully compatible and interchangeable at any time.

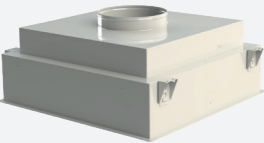


CHOICE OF EXHAUST DOORS

Doors for exhaust housings are fully interchangeable at any time; They offer optional integration of a 50 mm prefilter.

CLEANSEAL – FLEXIBLE AND ADAPTABLE

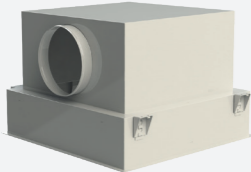
AVAILABLE CONFIGURATIONS



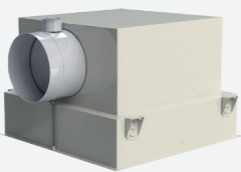
Top entry



Rectangular side entry



Side entry



Side entry with damper

STANDARDIZED DIMENSIONS

Filter (ext./mm)							
305 x 305	305 x 610	457 x 457	508 x 508	610 x 610	915 x 610	1108 x 508	1220 x 610
3P3*	3P6*	4P4	5P5*	6P6*	9P6*	11P5	12P6
392 x 392	392 x 697	544 x 544	595 x 595	697 x 697	1002 x 697	1195 x 595	1307 x 687

Housing foot print (ext./mm)

* Sizes available for CleanSeal Exhaust

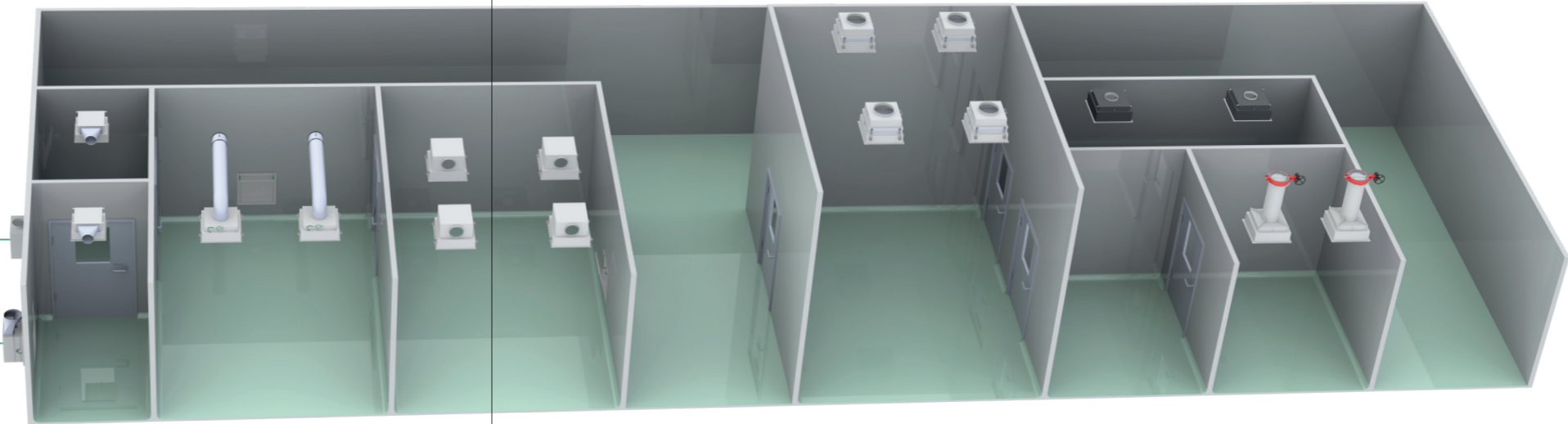
CLEANSEAL EXTRACT DOOR OPTIONS



Wall mounted option available with or without prefilter section in the door.

CEILING OR WALL MOUNTED SUPPLY OR EXHAUST AIR

Large standard range suitable for most applications.

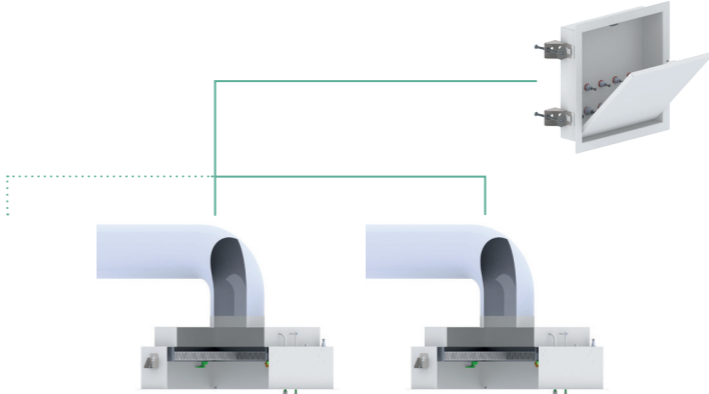


ADD-ONS FOR STANDARD FEATURES

- Complements for ISO compliant filter testing
- Integration and ergonomic enhancements
- Suspension options
- Integration flanges

INTEGRITY

- Networking your aerosol injection
- Aerosol injection through a central control box for any standard CleanSeal housing
- From 1 to 5 CleanSeal Integrity can be managed from a single Control Box inside or outside of the room
- Additional local injection option through the individual housing for Integrity versions



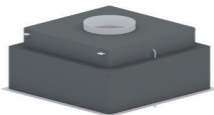
CUSTOMIZABLE – BESPOKE INTEGRATION

CleanSeal design concept is open to adaptation to your specific needs, from additional features and functions to specific finishes, custom formats and fully bespoke ceiling or wall integration. Examples include:



TOPLoader

Service access exclusively from above e.g. for high ceilings.



ARMAFLEX™ INSULATION

Insulates the housing to ensure its suitable for cold process air.



INTEGRATED BUBBLE TIGHT DAMPER

Bespoke integration for high containment applications and processes.

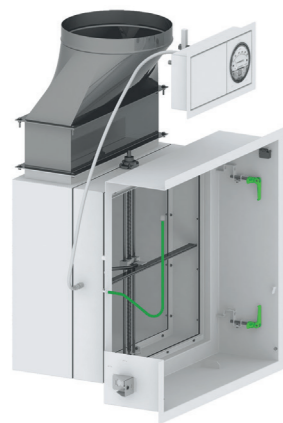
INTEGRITY - QUALIFIED FILTER VALIDATION

The optional integrated HEPA filter testing devices for supply and exhaust air applications are carefully tested for aerosol distribution quality and leak detection performance, to ensure safe operation and optimum support of ISO 14644-3 compliant in-situ testing.



FOR SUPPLY AIR

- IntegriPod injection for ISO 14644-3 compliant aerosol distribution
- ISO 14644-3 compliant aerosol distribution
- Upstream concentration uniformity has been validated for testing with discrete particle counter or photometer, with DEHS or PAO
- Aerosol injection through a central IntegriBox or through the individual housings
- Lower aerosol quantities
- More efficient testing
- Faster maintenance and operation
- Operator fail safe design
- Risk mitigation
- Clean room configuration adaptability: Injection from room side or technical side, for new built or retrofit projects



FOR EXHAUST AIR

- Compact testing shroud for aerosol injection with ISO 14644-3 compliant distribution
- Lower aerosol quantities
- For safe and easy use on wall and ceiling housings, easy to store

SUPERIOR LEAK DETECTION CAPABILITY

- Manual Integrity Probe (MIP) for filter scanning
- Qualified leak detection capability
- Sampling port and MIP drive access through a freely positioned control box
- MIP control with dedicated handheld driver

TRY OUR CONSULTANT PORTAL

- Customise the CleanSeal range to meet your cleanroom requirements
- Design and easily package your Supply and Extract air system requirements
- Get accurate budget pricing for all of your project requirements
- Get access to all of Camfil's online software and training platform

FIND OUT
ABOUT OUR
**CONSULTANT
PORTAL**



ENERGY EFFICIENT AND RELIABLE HEPA FILTERS FOR BEST IN CLASS PERFORMANCE IN ALL APPLICATIONS

Original Camfil filters make the best of your CleanSeal filter housings. Energy efficient HEPA panels are available for all housing sizes and many life-science relevant airflow modes, from low-energy laminar supply air to turbulent high airflow extraction. Between housing and filter sizes, there is a combination with best-in-class performance for every application.

The Megalam range of HEPA filters are designed to ensure the air in your cleanroom environment is protected throughout the filter operational lifetime. The Megalam HEPA filter has been designed to combine low energy consumption with guaranteed filtration performance. Megalam is available in a full range of efficiencies (H13-U17) to meet the strict air quality demands of your controlled environment. The Megalam is available with a number of different customisable options to ensure it meets your application and equipment requirements.



REDUCING ENERGY CONSUMPTION

Available in different filter depths the Megalam range can support your energy reduction requirements.

MAINTAINING PROCESS CLEANLINESS

Megalam is available with a big choice of specialized glass fiber or membrane Hepa media, from ultra-low outgassing for Microelectronics (Fabsafe) to hygienic and chemically inert for the Life Science, F&B or Healthcare industries (Prosafes).

ENSURING COMPLIANCE

All Megalam HEPA filters are individually scan tested and certified to the latest EN1822 test standards. All test certs are stored digitally and available through MyCamfil Connect application.

ABOUT MYCAMFIL CONNECT?

- Access your HEPA filter scan certs
- Easily share scan certificates with validation experts
- Paperless solution to store and manage HEPA filter documentation
- MyCamfil connect is an industry first application that supports you with the management, storage and archiving of your HEPA filter scan certificates.

SCAN HERE
TO DOWNLOAD
**MYCAMFIL
CONNECT**



Camfil – a global leader in air filters and clean air solutions

For more than half a century, Camfil has been helping people breathe cleaner air. As a leading manufacturer of premium clean air solutions, we provide commercial and industrial systems for air filtration and air pollution control that improve worker and equipment productivity, minimize energy use and benefit human health and the environment.

We firmly believe that the best solutions for our customers are the best solutions for our planet, too. That's why every step of the way – from design to delivery and across the product life cycle – we consider the impact of what we do on people and on the world around us. Through a fresh approach to problem-solving, innovative design, precise process control and a strong customer focus we aim to conserve more, use less and find better ways – so we can all breathe easier.

The Camfil Group is headquartered in Stockholm, Sweden and has 33 manufacturing sites, six R&D centres, local sales offices in 30 countries and 4,800 employees and growing. We proudly serve and support customers in a wide variety of industries and in communities across the world. To discover how Camfil can help you to protect people, processes and the environment.

www.camfil.com



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For further information please contact your nearest Camfil office.