

AHUs & Air Filters

Air Filter Housings for Areas Where Cost and Quality are Critical



when purchased PART

CLEAN AIR SOLUTIONS

CAMFIL TECHNOLOGIES DELIVER

Flexibility Engineers Want, Performance Users Need

"My LEED and medical facility projects are specific to required MERV air filter efficiencies in order to satisfy air quality goals. As an engineer, I don't feel confident with housings made by someone whose specialty is air conditioning, rather than air quality, for applications where health is a consideration."

Customers with commercial air conditioning units, such as shown below, are most adversely affected by inferior housings supplied by AHU manufacturers, for reasons that will be explained in the following pages.

BACKGROUND

Several years ago, air handling unit (AHU) manufacturers decided to make filter housings part of their units. This meant they essentially dictated what filters could be used in their equipment.

If an engineer specified a certain type of air filter, the AHU manufacturer would source the lowest cost and typically lowest performing filter that met the general intent.

There was another problem. The housings and frames made by the AHU companies were simple metal extrusions made to hold filters in place. They were not engineered and manufactured by a company that understands filtration and that housings must be designed to deliver the following capabilities that are important to users:

- prevent air bypass
- conserve energy by making sure treated air is not lost through leakage





GlidePack and FastFrames are important filter hardware alternatives.

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NO AIR FILTER BYPASS

Camfil housings are guaranteed to have less than 0.5% of air bypass @ 8.0" so all of the air moving through the housing is treated by the filters.

GlidePack is an engineered housing solution that ensures all air moving through the system is treated by the air filters and bypass is prevented. This weatherproof, side-access housing also prevents leakage.

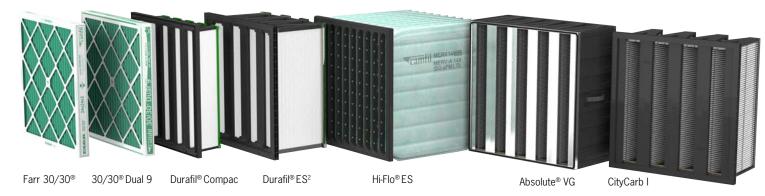
Standard AHU housings can leak in two directions: from inside the housing to the outside, and from the outside to the inside. As a result, a filter cannot deliver its rated efficiency. A separate issue related to leakage is the cost of cooled and heated air. When treated air is lost to leakage, utility costs are unnecessarily high.

The new Camfil GlidePack® MultiTrack housing is a multi-stage air filter housing with adaptable tracks to apply a variety of pre and final filters for superior indoor air quality in virtually any application. The housing may also be reconfigured in the field for upgrades or to adapt to the latest air filtration technology.

High-memory sponge neoprene door edge gaskets prevent contaminants from leaking into or out of the housing. Poly-sponge door gaskets eliminate filter air bypass between the housing doors and filters so all of the air is treated by the installed filters.

The integrity of housing to ambient leakage is less than 0.25% of rated flow at 3" w.g. and 0.5% of rated flow at 8" w.g.





Filters from all manufacturers are fully compatible with GlidePack housings.

FREEDOM IN FILTER CHOICE

The customers who asked Camfil to develop a quality air filter housing had numerous objections to housings supplied by equipment companies.

The #1 complaint was buyers were "locked in" to the filters and configurations equipment makers wanted them to buy now and in the future. If the customer accepted the housing supplied by the AHU manufacturer, a higher energy cost was paid and the customer would also endure inferior filtration for the entire service life of the AHU.

If the user's requirements changed, or if the user simply wanted a different filtration solution than the AHU maker had provided for, the only resource was costly customization or replacement.

Customers also realized that filter technology evolves continuously. What was purchased 10 or even five years ago is vastly different from what is preferred today. Locking-in decisions regarding filtration almost never make sense from the customer's standpoint.

The GlidePack MultiTrack housings developed by Camfil answer these concerns. Three sizes with multiple filter configurations and left-hand or right-hand door swings give engineers, contractors and customers virtually unlimited choices in terms of what filters are used, and how they're configured.

The size and filter depth options provide an economic advantage for contractors because they accommodate the rough-in

filters used for new construction, as well as the final filters. And because the MultiTrack filter housings prevent bypass, they assure that all filters perform to their greatest potential.

Filter choice is directly related to ongoing energy costs as well. The filters provided by the AHU manufacturers are typically less than 12" depth which inherently consumes more energy than Camfil 5-Star rated air filters.

GlidePack MultiTrack housings are engineered to accommodate a wide range of the best-performing air filter products so fan-related energy use is low at the time of installation and remains low throughout the filters' service life.



A filter is only as effective as its housing.

The GlidePack MultiTrack housings are available in depths of 13", 21" and 32" and hold 2" or 4" prefilters and 6", 12", 22" or 30" headered filters.

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Filter Size Standardization

Another common complaint from customers about AHU company housings is that as many as five different filter sizes are used in a single AHU. So, in addition to limiting filter choices, the user is forced to buy several filters in sizes that fit that housing.

Most companies today are trying to streamline the number of products to purchase and inventory, so standardizing filter size is an important step toward that goal.

It is also worth noting that non-standard filter sizes often perform at lower levels, with reduced life and higher average pressure drop than filters that were specifically selected for a facility and application.



Sustainability

systems' life because of this choice.

AHU's & Air Filters

AHU companies regard air filters as a commodity and source them

ENERGY COST INDEX ****

5-Star ECI Rating

Camfil 5-Star filters have the lowest average pressure drop and therefore the lowest energy use rate. In addition, they offer the longest service life—a major factor in minimizing labor and disposal costs. The 5-Star filters also maintain their rated efficiency (MERV and MERV-A) the entire time they are in use. They are, for many companies, an important part of an overall effort to meet corporate goals for waste minimization and sustainability.

No matter what filter is used, to get the filter performance you paid for, a Camfil housing is needed.

solely on price ... not life cycle cost, but straight purchase cost. This

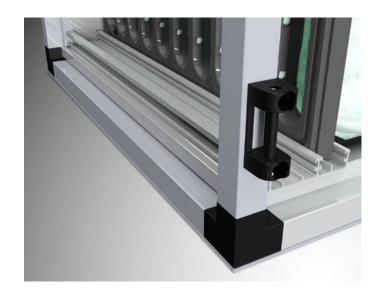
is not in the best interest of end users who will experience higher-

than-necessary maintenance and operational costs throughout the

Flexibility Future

GlidePack MultiTrack housings are engineered with highquality tracks and sealing technology that insures against leakage and optimizes both air quality and equipment protection. MultiTrack housings are available in three depths, 13", 21" and 32" which accommodate a wide variety of filter styles and sizes where both contaminant and gas phase filtration is needed.

Some tracks can be altered quickly and even removed without tools, to hold various air filter depths and design configurations. So, in the future, when higher-performance products are available, a Camfil housing will adapt to the new technology without modifications. The one-time investment in quality GlidePack MultiTrack housings will last (or outlast) the AHU system.



BUILT-UP BANK HVAC SYSTEM

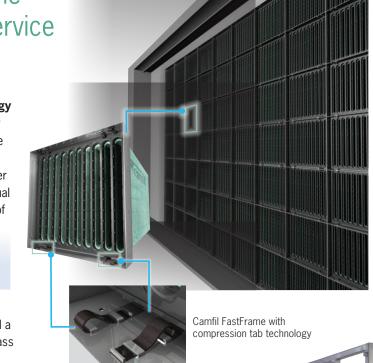
FastFrame[™] Universal Filter Frame Immediately Reduces Air Filter Service Time and Costs.

The Camfil FastFrame with exclusive compression tab technology

allows fast filter change-out without the hassle of fasteners – or worker issues with finger cuts! FastFrames hold a wide range of ASHRAE-grade final filters, prefilters and combinations. It is an ideal frame option for high-efficiency Durafil® ES, Durafil® Compac®, Hi-Flo® ES or any final filter with a 1" header. Prefilters, including the Camfil 30/30°, the 30/30° Dual 9 and other 1", 2" or 4" prefilters can also be used without the hassle of clips or fasteners.

> FastFrame is available in four sizes: 24" X 24". 12" X 24". 20" X 24" and 20" X 20". This meets the airflow requirements of any application.

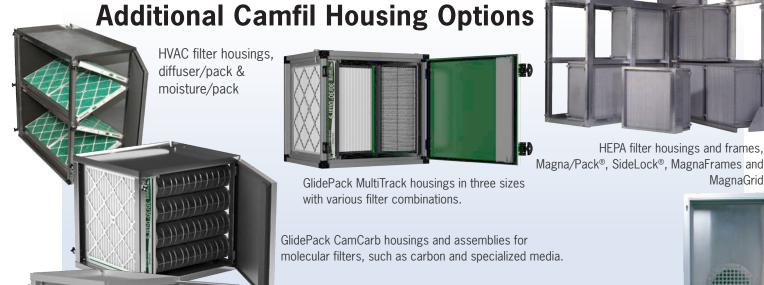
Features include 16 gauge all-welded galvanized steel construction and a 3/4" sealing flange with premium replaceable gaskets to prevent air bypass between the frame and header. Compression tabs provide a clear, **snap-in-place seal** for the final filter and a secure hold for the prefilters. Compression tabs are easily replaceable if ever needed.



Cleanroom modules, including Slimline RSR. DCM & Pharmaseal®

Containment housings, including

GB, FB and CamContain®



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Camfil - Clean Air Solutions

MagnaGrid

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 30 manufacturing sites, six R&D centers, local sales offices in 35+ countries, and about 5,600 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, visit us at www.camfil.com.









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