



Better Air is Our Business®



AmericanAirFilter® Side Access Demister

**Part of a Total Systems Approach
to Improved Indoor Air Quality (IAQ)**

The AAF side access filter housing is engineered for use with air handling units or other side access equipment. It offers the convenience of servicing the filter from outside the air duct and is especially suited for installations involving limited headroom.

The Demister Concept

The AAF Side Access Demister is designed to protect high-efficiency filters; air handling equipment; and the served space from mist, fog, and other liquid droplets. The unit consists of coalescing filters in a slim 12" housing, compatible with all other AAF side access equipment.

The basic operating principle of the Demister is a combination of impingement of entrained moisture, coalescence or growth of captured droplets, and gravitational flow to the drain.

Demister Filter

The 4" Demister filter cell consists of a media pack followed by a collection zone. The media pack contains a dense combination of flat and pleated galvanized mesh designed for moisture separation. The collection zone facilitates drainage and containment of larger droplets.

Each cell is enclosed in a 16 gauge galvanized steel frame designed for moisture flow. The frame is dimpled to automatically pitch the installed cell, so that moisture flows toward the four 1/2" holes near the air entering face.



Industrial Applications

Fugitive industrial mists often challenge air handling systems in manufacturing plants. While the primary recommendation is source capture of such contaminants, complete capture is often impossible. Low concentration oil mist, coolant mist, and other liquid contaminants can be effectively stripped from the return airstream. The end result will be enhanced air quality, reduced maintenance, and more effective coil performance.

Commercial Applications

Outside air intakes are often exposed to weather conditions that may challenge ordinary intake louvers leading to entrained moisture problems. The Side Access Demister provides added insurance in such situations.

Moisture can also occur in air systems where there is a possibility of coil blow-off or humidifier problems. In these situations, high efficiency filtration sections can be adversely affected resulting in mechanical damage or high pressure drop. The Demister can be used to protect these systems if such problems are anticipated.

Performance Data

Initial Resistance

@300 FPM	@350 FPM	@400 FPM	@450 FPM	@500 FPM
.08	.12	.17	.21	.25

Micron Size of Droplets Efficiency Rating

1.5	2.0	4.0	6.0	8.0	10.0	12.0	14.0	16.0	18.0	20.0
13%	25%	58%	76%	88%	91%	96%	97%	98%	99%	100%

Side Access Demister

Housing Features

Access Doors

Access doors feature over-center draw type plated latches. The pan formed doors seal against a raised housing collar furnished with Neoprene gaskets. All housings will have two access doors.

Rugged Construction

The Side Access Demister housing has exceptional structural strength. It utilizes 1⁵/₁₆" wide flanges, welded construction, vertical supports, and angle braces. This rugged design permits cantilevered installation with the flange connections supporting the unit.

The Demister housing is designed to operate at up to 6 in. w.g. negative or positive pressure. All doors seal against a peripheral Neoprene gasket surface.

Sizes

The Demister housing is offered in 96 sizes, spanning heights from nominal 1' through 8', and widths from nominal 1' through 12'. Capacities range from 1,000 CFM at 500 FPM to 48,000 CFM at 500 FPM.

Larger sizes are available. The Demister housing is designed to expand using standard sizes as building blocks. For example a 16' wide unit can be built using two 8' wide modules or an 8' high unit using two 4' modules. Modules are factory pre-engineered for field installation.

Housing Drains

The 16 gauge galvanized steel Demister housing is welded and features 1/2" drain couplings. Tubing connects the filter U-tracks from multiple levels to allow for draining. It is designed to mate directly to other AAF side access housings. The filters are normally self-cleaning, but may require periodic service depending on the contaminant mix in the intake air.

Standard

- Depth = 8 1/2"
- 2" or 4" Coalescing Filters
- Withstands 6 in. w.g. Positive Pressure
- 16-Gauge Galvanized Steel
- Welded Corners
- 1 5/16" Flanges
- Compact Design
- Factory Assembled

Capabilities (CFM) and Dimensions

Height ↓	Designation	Width →					
		1	2	3	4	5	6
	Housing	26 7/8"	49 1/2"	72 7/8"	96 1/4"	119 7/8"	143 1/4"
1	26 7/8"	2,000	4,000	6,000	8,000	10,000	12,000
2	51"	4,000	8,000	12,000	16,000	20,000	24,000
3	75 7/8"	6,000	12,000	18,000	24,000	30,000	36,000
4	99 1/4"	8,000	16,000	24,000	32,000	40,000	48,000

Note: Capacities are based on an airflow velocity of 500 FPM. For capacities based on velocities of 625 FPM increase capacities by a factor of 1.25. **Half size filter housings are available.**

Options

- Double Skin Insulation
- AHU Mating Flanges
- Weatherproof Construction
- High Pressure Construction
- Static Pressure Taps

