



Solutions for Indoor Air Quality (IAQ)

As Indoor Air Quality has become a more recognized topic amongst the public, HVAC systems and air filtration in homes and buildings are getting increased attention as well. Indoor air plays a major role in the health, safety, and productivity of building occupants. Effective air filtration has the ability to remove viruses and pathogens from the air, while also removing dirt, pollen, and other contaminants that negatively affect human health and comfort.

Better Health and Value for the Built Environment

Aside from cleaning the air that circulates through HVAC systems in homes and buildings, air filters featuring low pressure drop can contribute to energy savings, and filters with high dust loading capacity preserve the health of the HVAC system by keeping contaminants and dust from building up and avoiding expensive maintenance for homeowners or costly downtime for building owners and operators.

In short, choosing the right filtration solution for cleaner air is better for human health and better for the bottom line.

HVAC Starts With H&V

At the heart of every air filter is the filter media, the engineered material that largely determines the performance and reliability of the filter, and not all media is created equal. As a leader in the field of filtration solutions, H&V delivers high-efficiency media that allow filter manufacturers to meet and exceed residential and commercial global industry standards for HVAC filtration (e.g. ASHRAE 52.2, EN 779, ISO 16890). Our industry-defining line of technologies and products are designed to create cleaner and more sustainable residential, commercial, and industrial environments where families, employees, students, and visitors can thrive, with materials that provide superior particulate capture with less airflow resistance than other solutions in the market to achieve reduced energy costs.

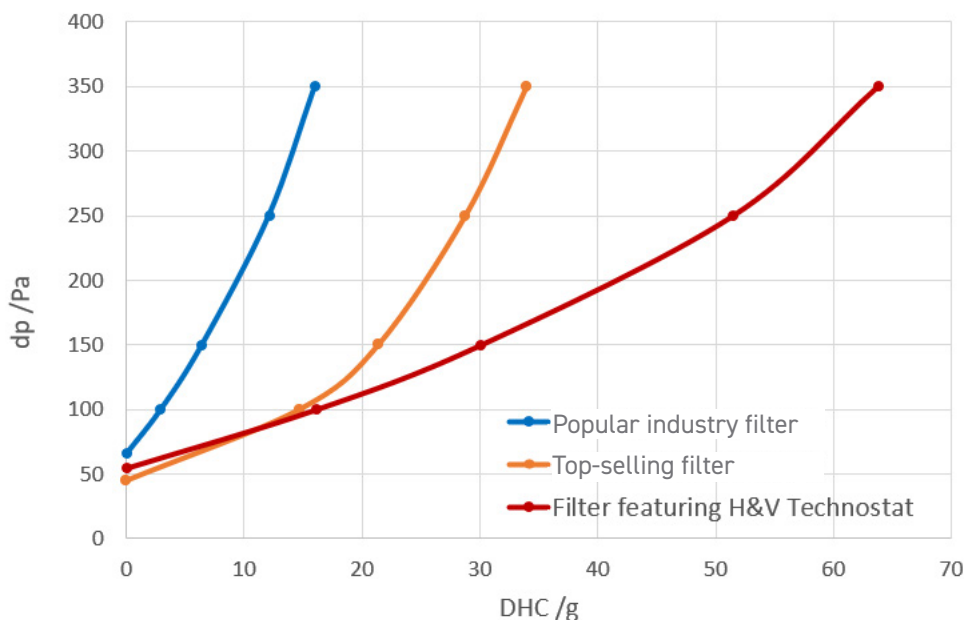
Application:

Panel Filters for residential, commercial and Industrial HVAC.



HV Technostat®
A Hollingsworth & Vose Innovation

- Offers the highest efficiency with the lowest resistance of any electret technology available on the market
- Ideal for HVAC among other applications which require high efficiency with very low resistance in a limited space



Panel filters featuring H&V Technostat have more than 2x the dust holding capacity with lower DP and ~50% longer life than other popular products in the market.

*Testing conducted on MERV12/FPR9 commercially available filter elements in accordance with ASHRAE 52.2 (air flow 1440 m³/h)

*When upgrading your level of filtration, the EPA recommends choosing at least a MERV 13 for your furnace filter, whole house air cleaner (WHAC), or commercial HVAC filter.

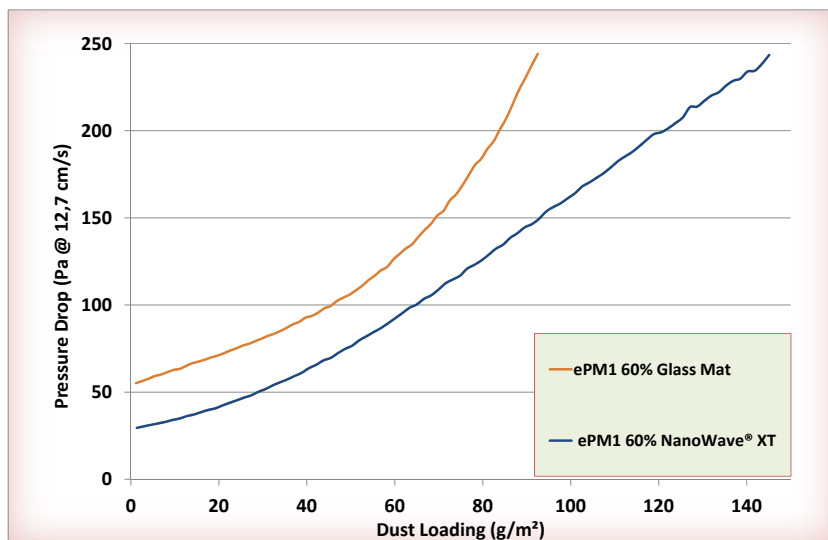
Application:

Pocket Filters for commercial and Industrial HVAC.



HV NanoWave®
A Hollingsworth & Vose Innovation

- Patented wave design allows air to permeate filters with less resistance enabling unparalleled energy savings and energy cost reduction
- Extended filtration surface and multi-layered gradient structure for 2-3x dust holding capacity compared to other synthetic and glass media
- Lowest Total Cost of Ownership for ISO16890. Available in filter classes up to ePM1 90%



- NanoWave grades compared to standard ePM1 60% glass show significant performance advantage in pressure drop and dust holding capacity

H&V is ready to provide residential, commercial and industrial IAQ solutions ranging from furnace and AC filters, to Whole House Air Cleaners, to commercial HVAC and data center filters. We are committed to the high-efficiency segment of this market and provide multiple types of filter media including:

Standard Product Offering:



Residential

Grade	# of pleats	Filter area ft ²	Filter size inches	Air flow CFM	Face velocity FPM	Initial resistance inches of H ₂ O	Efficiency E1	Efficiency E2	Efficiency E3	Initial MERV rating
TSP070NS015	36	10.56	24x24x1	1180/1200	295	0.23	64	89	98	13
TSP070NS015	36	10.56	24x24x1	1180/1200	295	0.25	68	91	98	13
TSP070NS015	30	8.8	24x24x1	1180/1200	295	0.30	61	91	97	13
TSP050NS015	30	8.8	24x24x1	1180/1200	295	0.24	53	84	94	12
TSP050NS015	30	8.8	24x24x1	1180/1200	295	0.25	54	85	94	13
TSP030NS015	28	8.2	24x24x1	1180/1200	295	0.18	39	70	86	11



Commercial and Industrial

Grade	# of pleats	Filter area ft ²	Filter size inches	Air flow CFM	Face velocity FPM	Initial resistance inches of H ₂ O	Efficiency E1	Efficiency E2	Efficiency E3	Initial MERV rating
TSP085NS015	33	19.3	24x24x2	1968	495	0.42	73.3	94.9	99	13
TSP070NS015	28	16.3	24x24x2	1968	495	0.35	67.7	92.8	98.4	13
TSP070NS015	29	16.9	24x24x2	1968	495	0.39	64	91	98	13
TSP070NS015	30	17.5	24x24x2	1968	495	0.40	70.7	93.5	98.2	13
TSP050NS015	29	16.9	24x24x2	1968	495	0.31	55.4	85.5	88	11



Commercial and Industrial

Platform	Grade	ISO 16890	EN779:2012	MERV	Pressure Drop (Pa)	Compared to other filter media
NanoWave® XT: Excellent Performance Technology	WA0160XT	ePM1 65%	F7	16	32	Higher DHC, 30-40% lower ΔP compared to premium glass mat
	WA0190XT	ePM1 85%	F9	16	50	
NanoWave® LT: Leading Performance Technology	WA0150LT	ePM1 60%	F7	14	43	Higher DHC, 20-30% lower ΔP compared to premium synthetic media
	WA0160LT	ePM1 65%	F7	14	47	
	WA0180LT	ePM1 80%	F8/F9	15	80	
NanoWave® ELT: Entry Level Technology	WA0255LT	ePM2.5 60%	F7	14	36	More than 2x higher DHC, 10-20% lower ΔP compared to standard synthetic media
	WA0270LT	ePM2.5 70%	F7	14	53	
	WA0270LT	ePM1 65%	F7	14	53	
	WA1050LT	ePM10 50%	M6	11	14	

Specialty Product Offerings Include:

- ASHRAE Glass Media
- Combination Media
- Adsorptive Media
- V-Bank and Rigid Box Filter Media

About Hollingsworth & Vose

Hollingsworth and Vose is a global manufacturer of advanced materials used in filtration, battery, and industrial applications. Family-owned for seven generations, the company's origins go back to the early 1700s and we have evolved continuously since that time.

Today, H&V's advanced materials contribute to a cleaner world through their use in products that provide clean air, clean liquids, and energy storage. Our Company is headquartered in East Walpole, Massachusetts USA, with 13 manufacturing and research & development facilities in the Americas, Europe, China, and India.