FILTER MATS

FILTER MATS, FILTER PANELS, PAINT MIST ARRESTORS, ROLL FILTERS

Viledon® filter mats are progressively structured, with the density of the fiber layers increasing towards the clean air side. This ensures an optimum in terms of defined filter performance and dust holding capacity, coupled with a low pressure drop. All filter mats are produced using an eco-friendly formula. We offer a range of variants for use in general ventilation and air-conditioning technology as well as for the painting industry.

FILTER MATS

FILTER MATS | COARSE DUST

SPECIFICATIONS	
Filter medium	P15 and T3 / 290 S: Polyolefin fibers; PSB: Polyester fibers
Recommended final pressure drop	250 Pa
Thermal stability	up to 100 °C
Moisture resistance	100 % rel. hum.
Fire class	F1 acc. to DIN 53438
Packing	1 roll

PSB series

Application

The PSB filter mats are used for intake air filtration in air-conditioning systems of all kinds, particularly for coarse dust arrestance or as a prefilter stage.

The PSB range comprises of

- PSB / 145 S
- PSB / 275 S
- PSB / 290 S

Features and benefits of the PSB series

- By virtue of their high dust holding capacity and their long lifetime, PSB filter mats are exceptionally cost-efficient.
- All types in this series prove their worth in application categories where stable arrestance performance is required when coping with a large dust loading and a high air flow rate.
- When used in exhaust air filtration, one of the advantages of the PSB series is that arrestance efficiency and dust holding capacity are ideally matched to each other.

P15 series

Application

All types in this series can cope with heavy-duty operation and are suitable for filtration in air-conditioning systems of all kinds.

The P15 series features the familiar Viledon® filter mats

- P15 / 150 S
- P15 / 350 S
- P15 / 500 S

Features and benefits of the P15 series

- High arrestance efficiency right from the start over the entire operational lifetime, for maximized operational dependability.
- The material's high mechanical strength ensures good dimensional stability, even when subjected to large air volumes, over the entire operational lifetime.
- Thanks to the polyolefin fibers used, P15 filter mats are largely resistant to chemicals such as solvents, acids and lyes. They must be protected against continuous UV irradiation.
- The filter mats can be cleaned by careful washing, beating or spraying; even after being washed, they remain dimensionally stable and retain their technical filtering characteristics. Our eco-friendly series of filters is much in demand among users prioritizing waste avoidance and filtration cost savings.

T3 / 290 S

This ultra-efficient G4 filter mat is suitable for filtration in confined spaces, e. g. in control cabinets or electrical equipment. Thanks to the use of polyolefin fibers, it is highly resistant to chemicals, and hydrophobic.

Delivery notes

All the filter mats we supply are airtight packed as roll goods in standard dimensions in plastic sheets. Other dimensions are available as roll goods or blanks.
Special shapes like die-cuts and bags, welded or sewn, are available on request.

								EN 779:2012	ISO 16890	
ARTICLE	ARTICLE NUMBER	DIMENSIONS (W × L) [mm / m]	THICKNESS APPROX. [mm]	WEIGHT PER UNIT AREA APPROX. [g / m²]	NOMINAL MEDIA VELOCITY [m / s]	DUST HOLDING CAPACITY (ASHRAE / 250 Pa) [g / m²]	INITIAL PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	INITIAL GRAV. ARRESTANCE [%]
PSB / 145 S 40 / 2000	7833647	2,000 / 40	10	120	2	600	22	G2	ISO coarse 30%	30
P15 / 150 S 40 / 2000	8039227	2,000 / 40	8	100	2	600	30	G2	ISO coarse 30%	33
PSB / 275 S 30 / 2000	53375688	2,000 / 30	15	180	1.5	700	22	G3	ISO coarse 45%	45
P15 / 350 S 30 / 2000	8039427	2,000 / 30	14	200	1.5	600	30	G3	ISO coarse 55%	57
PSB / 290 S 20 / 2000	8019407	2,000 / 20	20	300	1	750	22	G4	ISO coarse 60%	62
P15 / 500 S 20 / 2000	8040248	2,000 / 20	20	350	1	600	30	G4	ISO coarse 75%	75
T3 / 290 S 40 / 2000	8105365	2,000 / 40	8	200	0,25	250	14	G4	ISO coarse 90%	90

FILTER MATS

FILTER MATS | FINE DUST

SPECIFICATIONS	
Filter medium	Polyester fibers
Recommended final pressure drop	450 Pa
Thermal stability	up to 100 °C; PA / ProfAir: Briefly up to 120 °C
Moisture resistance	up to 100 % rel. hum.
Migration test class	S0
Fire class	F1 acc. to DIN 53438

A3 / 300 S

Application

The A3 / 300 S filter mat is designed primarily for high-quality final filtration in air-conditioning devices and systems, and as prefilters in multi stage intake air systems.

Features and benefits

- The special smoothing of the clean air side increases the rigidity of the filter mat, rendering it sturdy and installation-friendly.
- By virtue of its very good arrestance performance, the A3 / 300 S filter mat can be used universally in all applications in which high-quality filtration in the fine dust range is demanded in order to protect both people and machinery.

ProfAir

Application

ProfAir is a fine filter for final filtration of intake air in repair paint-spray booths. The filter mat ensures high arrestance performance for particles > 10 µm and thus provides a high degree of protection against paintwork damage.

PA / 500-10, PA / 560 G-10 and PA-5 micron

Application

The PA / 500-10 and PA / 5560 G-10 filter mats, acknowledged as the standard in surface treatment technology, are used for final filtration of the intake air in paint shops und paint-spray booths. The principal application category for the PA-5 micron filter mat is final filtration of the intake air in paint-spray processes with particularly stringent requirements for air purity.

Features and benefits of the PA series

- PA / 500-10 and PA / 560 G-10 assure practically 100 % arrestance of particles > 10 µm, which are able to cause visually perceptible surface blemishes. This offers their users maximized security against paint-work defects.
- With practically 100 % arrestance of particles > 5 µm, the PA-5 micron filter mat meets even the most stringent of requirements in surface treatment technology and offers its users maximized dependability in the production process.
- The adherent surface of each individual fiber in the filter media can be relied upon to retain already-arrested particles over the entire operational lifetime.
- Thanks to the adherent surface of the fibers, the PA-5 micron is able to lastingly bond more than 3 kg / m² of pourable aloxite dust.
- PA / 560 G-10 and PA-5 micron additionally possess a reinforcing mesh fabric on the clean air side, which increases the filter mat's stability and reduces the risk of the clean air side being damaged during installation.
- All PA filter mats are resistant to solvent vapours and contain no silicone.

Delivery notes

All the filter mats we supply are airtight packed as roll goods in standard dimensions in plastic sheets. Other dimensions available on rolls or as blanks.
Special shapes like die-cuts and bags, welded or sewn, are available on request.

EN 779:2012 ISO 16890

ARTICLE	ARTICLE NUMBER	DIMENSIONS (W × L) [mm / m]	THICKNESS APPROX. [mm]	WEIGHT PER UNIT AREA APPROX. [g / m²]	NOMINAL MEDIA VELOCITY [m / s]	DUST HOLDING CAPACITY (AC FINE / 300 Pa) [g / m²]	INITIAL PRESSURE DROP* [Pa]	FILTER CLASS ACC. TO EN 779:2012*	CLASS TO ISO 16890	PARTICULATE MATTER EFFICIENCY [%]		
										ISO ePM1	ISO ePM2.5	ISO ePM10
A3 / 300 S 20 / 2000	8422288	2,000 / 20	20	300	0.5	550	20	M5	ISO ePM10 50%	5	12	52
ProfAir N 20 / 2000	53350549	2,000 / 20	23	545	0.5	550	30	M5	ISO ePM10 55%	11	17	55
PA / 500-10 20 / 2000	7802106	2,000 / 20	25	500	0.5	680	25	M5	ISO ePM10 50%	10	15	50
PA / 560 G-10 20 / 1600	53253198	1,600 / 20	25	580	0.5	590	30	M5	ISO ePM10 55%	11	17	55
PA / 560 G-10 20 / 2000	7802206	2,000 / 20	25	580	0.5	590	30	M5	ISO ePM10 55%	11	17	55
PA / 560 G-10 22 / 1600	8887232	1,600 / 22	25	580	0.5	590	30	M5	ISO ePM10 55%	11	17	55
PA / 560 G-10 22 / 2000	8238130	2,000 / 22	25	580	0.5	590	30	M5	ISO ePM10 55%	11	17	55
PA-5 micron BK 20 / 2000	53296957	2,000 / 20	25	650	0.5	470	55	M6	ISO ePM10 65%	7	19	65

* rated at bei nominal media velocity 0.25 m/s

FILTER MATS

FILTER PANELS

SPECIFICATIONS	
Filter medium	Various Viledon® filter media available
Thermal stability	70 °C
Moisture resistance	100 % rel. hum.
Frame	Polyurethane

Application

The filter panels are used for intake air filtration in air-conditioning systems of all kinds, particularly for coarse dust arrestance or as prefilter stage. Application areas include e. g.

- Heavy industry: cement plants, steel mills,
- Automotive: paint booths,
- Food industry,
- Petrochemical industry.

Filter panels are used to protect the climate and ventilation systems, control panels and heating systems.

Features and benefits

- Large range of high quality and efficient Viledon® filter media.
- Extremely rigid.
- Non-corroding and moisture-resistant up to 100 % relative humidity.
- Easy installation, no extra clamping necessary.
- Self-sealing through overlapping.

Delivery notes

Filter panels in a washable version are available upon request.

						EN 779:2012	ISO 16890	
ARTICLE	ARTICLE NUMBER	FILTER MEDIUM	DIMENSIONS (W×L) [mm]	NOMINAL VOLUME FLOW [m³/h]	PRESSURE DROP [Pa]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	INITIAL GRAV. ARRESTANCE [%]
LH 111 MIT P15/150 S 610/610	53263665	P15/150 S	610×610	2,600	25	G2	ISO coarse 30%	33
LH 101 MIT PSB/290 S 610/610	53263659	PSB 290 S	610×610	1,300	35	G4	ISO coarse 60%	62
LH 101 MIT PSB/290 S 700/500	53263662	PSB 290 S	700×500	1,250	35	G4	ISO coarse 60%	62
LH 101 MIT PSB/290 S 625/500	53263658	PSB 290 S	625×500	1,100	35	G4	ISO coarse 60%	62
LH 101 MIT PSB/290 S 500/500	53263660	PSB 290 S	500×500	720	35	G4	ISO coarse 60%	62
LH 101 MIT PSB/290 S 500/400	53263661	PSB 290 S	500×400	900	35	G4	ISO coarse 60%	62
LH 103 MIT P15/500 S 610/610	53253599	P15/500 S	610×610	1,300	35	G4	ISO coarse 75%	75
LH 103 MIT P15/500 S 500/500	53000301	P15/500 S	500×500	900	35	G4	ISO coarse 75%	75
LH 103 MIT PA/560 G-10 500/500	53430605	PA/560 G-10	500×500	450	55	M5	ISO ePM 10 55%	90

FILTER MATS

ROLL FILTERS | COARSE DUST

SPECIFICATIONS	
Filter medium	Polyester fibers
Recommended final pressure drop	160 Pa
Initial pressure drop	50 Pa at 2.5 m/s
Dust holding capacity	400 g/m²
Gravimetric efficiency	80% (EN 779)
Weight	250 g/m²

Application

The R/260 filter mat is used for filtration in roll filter equipment.

Features and benefits

The medium used is a high-performance nonwoven made of polyester fibers with thermal fiber bonding, i. e. without any bonding agents. The filter medium is progressively structured, featuring fiber layers with different fiber diameters, arranged one after the other in such a way that the density of the fiber layers increases towards the clean air side. This ensures an optimum in terms of defined filter performance and dust holding capacity. Result: longer operational lifetime of the filter. A scrim increases the mechanical strength.

Fire behaviour

Viledon® filter media meet the stringent requirements of fire class F1 in conformity with DIN 53438, and are thus self-extinguishing.

Delivery notes

Available on a cardboard core or a metal spool.
The roll goods R/260 (40 running meters) are manufactured in three different widths: 2,200 mm, 1,900 mm and 1,600 mm.

			EN 779:2012	ISO 16890	
ARTICLE	ARTICLE NUMBER	THICKNESS APPROX. [mm]	FILTER CLASS ACC. TO EN 779:2012	CLASS TO ISO 16890	INITIAL GRAV. ARRESTANCE [%]
LH R 260/810	53329934	8	G3	ISO coarse 40%	43
LH R 260/838	53329914	8	G3	ISO coarse 40%	43
LH R 260/1110	53329936	8	G3	ISO coarse 40%	43
LH R 260/1143	53329915	8	G3	ISO coarse 40%	43
LH R 260/1250	53361322	8	G3	ISO coarse 40%	43
LH R 260/1410	53329938	8	G3	ISO coarse 40%	43
LH R 260/1448	53329916	8	G3	ISO coarse 40%	43
LH R 260/1710	53329940	8	G3	ISO coarse 40%	43
LH R 260/1753	53329917	8	G3	ISO coarse 40%	43
LH R 260/2010	53355829	8	G3	ISO coarse 40%	43
LH R 260/2058	53329918	8	G3	ISO coarse 40%	43

FILTER MATS

PAINT MIST ARRESTORS, GLASS-FIBER

SPECIFICATIONS	
Fillter medium	Glass-fibers
Thermal stability	up to at least 80 °C
Fire behaviour	non-flammable acc. to DIN 4102
Nominal media velocity	0.7–1.75 m/s

Application

High-quality filtration for paint-spray booth exhaust air. The PS 100 type, thanks to its higher arrestance efficiency is particularly well-suited for use in installations with heat recovery systems. The Paint Stop Hydro PSH 75 filter mat is ideally suited for arresting water-based paint. During the intended use as a paint mist arrestor, the safety regulations for avoiding self-ignition must be complied with.

Features and benefits PS 50 / PS 100

- Dimensionally elastic glass-fiber medium with a progressive structure, i. e. openly structured face side (green) and increasing fiber density towards the clean air side (white).
- High dimensional stability even when loaded thanks to low compressibility, which means the entire material depth is used for storing paint mist.
- Non-flammable in conformity with DIN 4102 and thermally stable up to 80 °C.

Features and benefits of the PSH 75 Paint Stop Hydro

- A shape-elastic high performance glass-fiber medium is used.
- Thanks to its fine, elastic material structure, the surface is prevented from being prematurely clogged.
- Enhanced material rigidity thanks to special finish.
- The paint mist arrestor PSH 75 scores excellently in terms of increased paint storage capacity for hydro-paints, with concomitantly long useful lifetime.

Delivery notes

PS 50 | PS 100 and PSH 75 are available on request in all commonly encountered roll lengths and widths, and as rectangular blanks.

ARTICLE	DIMENSIONS (W × L) [mm / m]	THICKNESS APPROX. [mm]	WEIGHT PER UNIT AREA APPROX. [g / m²]	INITIAL PRESSURE DROP [Pa]	PAINT MIST ARRESTANCE EFFICIENCY [%]	PAINT HOLDING CAPACITY (AT 80 PA AND 0.7 m / s) [g / m²]
PS 50 20 / 1000	1,000 / 20	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 20 / 1524	1,524 / 20	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 20 / 2000	2,000 / 20	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 25 / 500	500 / 25	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 25 / 1000	1,000 / 25	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 25 / 1250	1,250 / 25	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 25 / 1524	1,524 / 25	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 25 / 2000	2,000 / 25	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 50 / 500	500 / 50	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 50 / 1000	1,000 / 50	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 50 / 1250	1,250 / 50	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 50 / 1524	1,524 / 50	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 500	500 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 610	610 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 660	660 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 760	760 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 860	860 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 910	910 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 1000	1,000 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 1250	1,250 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 1524	1,524 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 50 91 / 2000	2,000 / 91	50–65	220–240	7–40	93–97	3,500–4,700
PS 100 20 / 1000	1,000 / 20	100	350	14–60	98–99	3,900–5,050
PS 100 20 / 1524	1,524 / 20	100	350	14–60	98–99	3,900–5,050
PS 100 20 / 2000	2,000 / 20	100	350	14–60	98–99	3,900–5,050
PSH 75 20 / 1000	1,000 / 20	75	300	10–50	>98	>4,000