

AIR PERMEABILITY

Filter Media Air Permeability Chart

Typical air permeability ranges, in CFM, for the needle felts, woven fabrics and coated materials American Fabric Filter uses to build filter bags, dust collector bags, connectors and custom products. Lower CFM means a tighter fabric that captures finer dust; higher CFM passes more air at a lower pressure drop.

Needle Felt Media	Min CFM	Max CFM
9 oz. Plain PE Felt	45	65
9 oz. Singed PE Felt	45	65
10 oz. Glazed PE Felt	40	55
10 oz. Glazed 2 Sides PE Felt	40	55
10 oz. Shaker Felt	40	55
10 oz. Singed 2 Sides PE Felt	40	55
12 oz. Glazed PE Felt	35	45
12 oz. Plain PE Felt	35	45
12 oz. Singed PE Felt	35	45
16 oz. Glazed PE Felt	18	35
16 oz. Glazed 2 Sides PE Felt	18	35
16 oz. Plain PE Felt	18	35
16 oz. Singed PE Felt	18	35
16 oz. Singed 2 Sides PE Felt	18	35
22 oz. Plain PE Felt	10	15
12 oz. Tetratex Felt	Call	Call
16 oz. Tetratex Felt	12	18
12 oz. Singed Polypropylene Felt	30	40
16 oz. Glazed Polypropylene Felt	18	30
16 oz. Plain Polypropylene Felt	18	30

Woven Filter Fabrics	Min CFM	Max CFM
8 oz. Cotton Sateen	20	25
Polyester Sateen	20	25
868B Dacron	30	35
FV3677 Dacron	20	25
8 oz. Canton Flannel	40	45
10 oz. Canton Flannel	20	30
12 oz. Canton Flannel	35	40
14 oz. Canton Flannel	30	35
90126 Polyester	20	40
322 Polyester	70	90
1212 Willstretch	70	70
Muslin	Call	Call
Victor Nylon	4	4
Nylon Satin	20	25
#10 Nylon Duck	5	5
Nylon Cordura	3	3
Polyester Duck	Call	Call
#8 Cotton Duck	0	3

Specialty and Coated Fabrics	Min CFM	Max CFM
Nomex	8	11
Hypalon (NCN)	0	0
RCN	0	0
CL Black Rubber	0	0
CL White Rubber	0	0

"Call" means data is available on request. A value of 0 indicates a coated or rubber fabric that does not pass air. Ranges are typical; contact us to confirm the right media for your dust, temperature and collector.

FIBER PROPERTIES

Fiber Reference Chart

Resistance ratings for common filter fibers against acids, alkalis, dry heat, mildew, abrasion and UV light. Use it to narrow fabric choices for the conditions inside your baghouse or dust collector.

Fiber	Acid	Alkali	Dry Heat °F (Continuous / Short)	Mildew	Abrasion	UV Light	Characteristics
Cotton	Poor	Fair	180 / 225	Poor	Fair	Poor	General applications up to 210° F in neutral conditions.
Nylon	Fair	Excellent	200 / 275	Excellent	Excellent	Fair	Excellent mechanical resistance.
Dacron Polyester	Very Good	Good	275 / 300	Excellent	Good	Very Good	High temperature resistance. High tensile strength and mechanical resistance. Excellent dimensional stability.
Polypropylene	Excellent	Excellent	158 / 212	Not attacked by mildew	Excellent	Very Good	Excellent resistance to most acids and alkalis. Limited resistance to high temperature. Good resistance to sunlight and abrasion.
Nomex®	Fair	Excellent	428 / 572	Excellent	Excellent	Fair	Excellent resistance to high temperature. High tensile strength and mechanical resistance.

FIBER IDENTIFICATION

Fabric Burn Test

A quick way to identify an unknown filter fabric. Burn a small sample away from anything flammable and compare the flame, odor and ash to the chart below.

Fabric	Burning Characteristics	Odor	Ash
Cotton	Burns with a flame. Has an afterglow.	Burning paper	Black, powdery
Polyester	Melts and burns with a sputtering flame. Thick black smoke.	Faintly sweet	Hard, black, rough and shiny
Polypropylene	Melts and burns with a steady, clear flame. No smoke.	Very little odor	Hard, turns opaque
Nylon	Melts and burns with a sputtering flame. White smoke.	Burning garbage	Hard, round, gray-brown and shiny
Aramid / Nomex®	Very slow to ignite. Will not support combustion or melt. Material chars and curls.	Faintly sweet	Black, crushes into black powder
Acrylic	Melts and burns rapidly with a sputtering flame. Thick black smoke.	Faintly sweet	Crumbles into a black or brownish-orange powder

Need help choosing filter media? Send us your dust type, operating temperature, moisture and collector make and model, or send a sample filter. Call **1-877-742-3653** or request a quote at americanfabricfilter.com/request-quote.