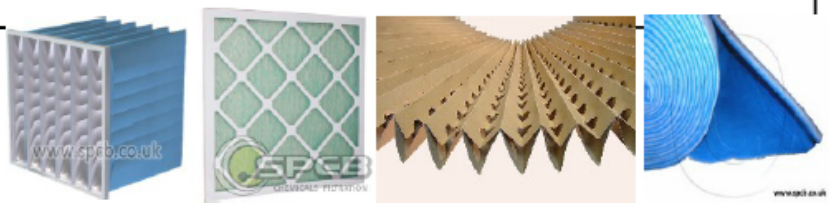
Classification of Air Filters

The European standard for air filters (EN779:2012) classifies air filters based on their lowest filtration efficiency, also referred to as minimum efficiency (ME). This ensures that filters can be compared after their initial filtration efficiency.
Fine filters previously rated as F5 or F6 to EN779:2002 are not required to meet an ME value in the new situation. To clearly differentiate these from those that do, filter classes F5 and F6 have been renamed to M5 and M6 as part of a new medium filter category.

CLASSIFICATION OF AIR FILTERS[1] - Principal Grades of Filters G1 to F9 (EU1 to EU9)							
Group	Class	Final pressure drop (test) Pa	Average arrestance (Am) of synthetic dust %	Average efficiency (Em) for 0.4 µm particles %	Minimum efficiency[2] for 0.4 µm particles %	Micron size	Typical uses
Coarse	G1	250	50≤Am<65	_	_	General protection to 15-20µm	Coarse prefiltration: Provision against accumulation of insects, textile fibres, coarse particulates
	G2	250	65≤Am<80	_	_		
	G3	250	80≤Am<90	_	_	General protection to 5-15 µm Prefiltration for fine filters	Medium level prefiltration: Protection against pollens. Simple ventilation units for factories
	G4	250	90≤Am	_	_	Protection to 5µm for fine filters	High level prefiltration: Air conditioning of paint booths, kitchens.
Medium	M5	450	_	40≤Em<60	_	Protection to 2µm	Supply air and partial air conditioning for restaurants, gymnasia, food shops, schools, engineering workshops
	M6	450	_	60≤Em<80	_	Protection to 1µm	Effective against all types of dust, including soots. Air conditioning for laboratories, offices, theatres, computer rooms, spray booths.
Fine	F7	450	_	80≤Em<90	35		
	F8	450	_	90≤Em<95	55		Effective against soots, oil, mist, bacteria. Air conditioning of clean rooms, pharmaceutical, animal health, laboratories.
	F9	450	_	95≤Em	70		

[1] The characteristics of atmospheric dust vary widely in comparison with those of the synthetic loading dust used in the tests. Because of this, the test results do not provide a basis for predicting either operational performance or service life. Loss of media charge or shedding of particles or fibres can also adversely affect efficiency.
[2] Minimum efficiency is the lowest of any of the following three values: initial efficiency, discharged efficiency or efficiency throughout the test's loading procedure.

We supply all types of air input and extraction filters, cardboard concertina, pleated panels, glass fibre, bag filters ...



AIR FILTER CLASSIFICATION CHART