

# EUROPEAN FILTER TEST METHODS

It has become very difficult and confusing to try to work through the maze of different filter testing standards. The purpose of this document is to offer some assistance in comparing the ASHRAE Standards and those utilized in Europe.

The table on the right is an attempt to combine the major testing standards into one easy to use overview. Please note that there is no way to combine all of the nuances into one table so please consult the individual test standards for more details.

Below is a quick overview comparison of the ASHRAE 52.2-2007 and EN 779:2002 methods.<sup>1</sup>

### ASHRAE 52.2-2007

- Domestic in use
- Uses a solid aerosol test challenge

### EN 779:2002

- International use is goal
- Uses a liquid aerosol test challenge

Please note that these test standards are under constant review – so please consult the latest version of these test standards.

Type	Eurovent Class	CEN EN779 Class	ASHRAE 52.1	ASHRAE 52.2
Coarse Dust Filter	EU1	G1	<65% Arrestance	MERV 1
	EU2	G2	65<70% Arrestance	MERV 2
			70<75% Arrestance	MERV 3
			75<80% Arrestance	MERV 4
	EU3	G3	80<85% Arrestance	MERV 5
		85<90% Arrestance	MERV 6	
	EU4	G4	>90% Arrestance	MERV 7
			MERV 8	
Fine Dust Filter	EU5	F5	40<45% ASHRAE	MERV 9
	EU6	F6	50<55% ASHRAE	MERV 10
			60<65% ASHRAE	MERV 11
	EU7	F7	70<75% ASHRAE	MERV 12
			80<90% ASHRAE	MERV 13
EU8	F8	90<95% ASHRAE	MERV 14	
EU9	F9	>95% ASHRAE	MERV 15	
High Efficiency Particulate Air Filter (HEPA)	EU10	H10	85% DOP	MERV 16
	EU11	H11	95% DOP	
	EU12	H12	99.5% DOP	***
	EU13	H13	99.95% DOP	***
Ultra Low Penetration Air Filter (ULPA)	EU14	H14	99.995% DOP	***
	EU15	U15	99.9995% DOP	***
	EU16	U16	99.99995% DOP	***
	EU17	U17	99.999995% DOP	***

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