

**U.S. Department of Health & Human Services
Filter Efficiencies for Central Ventilation and Air Conditioning Systems in General Hospitals**

Area Designation	Number of Filter Beds	Filter Bed # 1 Efficiency	Filter Bed # 2 Efficiency
All areas for inpatient care, treatment, and diagnosis, and those areas providing direct service or clean supplies such as sterile and clean processing, etc.	2	30	90
Protective environment room	2	30	99.97
Laboratories	1	80	
Administrative Bulk storage Food preparation areas Laundries Soiled holding areas	1	30	

Notes:

Additional roughing or prefilters should be considered to reduce maintenance for filter with higher efficiencies than 75 percent.

The filtration efficiency ratings are based on average dust spot efficiency per ASHRAE 52.1-1992.

Approximate conversion of ASHRAE 52.1 values to ASHRAE 52.2 values;

30% dust spot – MERV 7, 80% dust spot – MERV 13., 90% dust spot – MERV 14.



**American Society of Heating, Refrigerating, and Air Conditioning Engineers (ASHRAE)
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Area Designation	Number of Filter Beds	Filter Bed # 1^a Efficiency	Filter Bed # 2^b Efficiency	Filter Bed # 3^c Efficiency
Orthopedic operating room Bone marrow transplant operating room Organ transplant operating room	3	25	90	99.97
General procedure operating room Delivery rooms Nurseries Intensive care units Patient care rooms Treatment rooms Diagnostic & related areas	2	25	90	
Laboratories Sterile storage	1	80		
Administrative Bulk storage Food preparation areas Laundries Soiled holding areas	1	25		

^a Based upon ASHRAE Filter Testing Standard 52.1

^b Based upon efficiency on particles 0.3 micron in size

^c HEPA filters at air outlets

Approximate conversion of ASHRAE 52.1 values to ASHRAE 52.2 values;
25% dust spot – MERV 6, 80% dust spot – MERV 13, 90% dust spot – MERV 14.

