

FILTER EFFICIENCIES FOR CENTRAL VENTILATION AND AIR-CONDITIONING SYSTEMS IN GENERAL HOSPITALS

Area Designation	Minimum Number of Filter Beds	Filter Efficiency (MERV ¹)	
		No. 1	No. 2
Orthopedic operating room			
Bone marrow transplant operating room	2	8	17 ²
Organ transplant operating room			
General procedure operating rooms			
Delivery rooms			
Nurseries			
Intensive care units	2	8	14
Patient care rooms			
Treatment rooms			
Diagnostic and related areas			
Laboratories	1	13	--
Sterile storage			
Food preparation areas			
Laundries			
Administrative areas	1	8	--
Bulk storage			
Soiled holding areas			

Source: 2003 ASHRAE Handbook - HVAC Applications

1. MERV = Minimum Efficiency Reporting Value based on ASHRAE Standard 52.2-1999.
2. HEPA filters (minimum of 99.97% on 0.3 microns) should be used on air supplies serving protective environment rooms for clinical treatment of patients with a high susceptibility to infection due to leukemia, burns, bone marrow transplant, organ transplant, or human immunodeficiency virus (HIV).
3. HEPA filters should be used on discharge air from fume hoods or safety cabinets in which infectious or highly radioactive materials are processed.
3. All filters should be installed to prevent leakage between filters and supporting frames.
4. A manometer should be installed in the filter system to measure pressure drop across each filter bank.