



FILTER EFFICIENCIES FOR HEALTH CARE CENTRAL VENTILATION AND AIR CONDITIONING SYSTEMS

Published by the American Institute of Architects, Academy of Architects for Health
with Assistance from the U.S. Department of Health and Human Services - 2006

Area Designation	Maximum No. of Filter Beds	Minimum Filter Efficiency ⁽¹⁾	
		Filter Bed No.1	Filter Bed No.2
General Hospitals and Rehabilitations Facilities			
All areas for Inpatient Care, Treatment, and/or Diagnosis, and those areas providing Direct Service or Clean Supplies such as Sterile and Clean Processing, etc	2	MERV 8 (30%)	MERV 14 (90%)
Protective Environmental Rooms.	2	MERV 8 (30%)	99.97% at .03 μ IEST TYPE A (MERV 17)
Laboratories	1	MERV 13 (80%)	-
Administrative, Bulk Storage, Soiled Holding Areas, Food Preparation Areas, and Laundries.	1	MERV 8 (30%)	-
Recirculation of air within Individual Isolation Rooms and Lab Hoods (Exhaust)	1	99.97% at .03 μ IEST TYPE A (MERV 17)	-
Psychiatric Hospitals			
All areas for In-Patient Care, Treatment and/or Diagnose, and those areas providing Direct Service	2	MERV 8 (30%)	MERV 14 (90%)
Administrative, Bulk Storage, Soiled Holding Areas, Food Preparation Areas	1	MERV 8 (30%)	-
Nursing Care Facilities			
All areas for Inpatient Care, Treatment, and/or Diagnosis, and those areas providing Direct Service or Clean Supplies	2	MERV 7 (30%)	MERV 13 (80%)
Administrative, Bulk Storage, Soiled Holding Areas, Food Preparation Areas, and Laundries	1	MERV 7 (30%)	-
Outpatient Facilities			
All areas for In-Patient Care, Treatment, and/or Diagnosis, and those areas providing Direct Service or Clean Supplies	2	MERV 8 (30%)	MERV 14 (90%)
Laboratories	1	MERV 13 (80%)	-
Administrative, Bulk Storage, Soiled Holding Areas, Food Preparation Areas, and Laundries	1	MERV 8 (30%)	-

⁽¹⁾ Additions roughing or prefilters should be considered to reduce maintenance required for filters with efficiency higher than 75%

⁽²⁾ MERV = Minimum Efficiency Reporting Value. MERVs are based on ASHRAE standard 52.2.

⁽³⁾ The Filtration efficiency ratings are based on average dust spot efficiencies per ASHRAE Standard 52.1.

Additional Requirements

1. Filter holding frames shall be durable.
2. Filter holding frame shall be sized to provide an airtight fit within the enclosing ductwork.
3. All joints between filter frame banks and the enclosing ductwork shall have gaskets or seals to provide a positive seal against air leakage.
4. A resistance gauge shall be installed across each filter bed having a required efficiency of 75% or more, including hoods requiring HEPA filters.