

a fluctuating air movement are not acceptable for airborne infection isolation rooms, protective environment rooms or those critically sensitive areas listed in Table 315. For nonsensitive areas, variable air volume systems meeting the following criteria can be considered:

407.5.1.1 The VAV system shall comply with code requirements for outside air, total air, and pressure relationship through the full range of operation from minimum to maximum.

407.5.1.2 The central return or exhaust fan shall be controlled to accomplish the variable air volume requirements of the individual rooms served by the fan as described in Section 407.5.1.3.

407.5.1.3 Variable air volume for return or exhaust air shall be accomplished by utilizing an automatic modulating damper in the return or exhaust air for each zone. The damper will modulate from full open to minimum position in conjunction with the supply air VAV terminal box.

408.0 Filters [For OSHPD 1, 2, 3 & 4]

408.1 General. Filter efficiencies shall be certified by the manufacturer and shall be based on ASHRAE Standard 52.1-1992, Gravimetric and Dust-spot Procedures for Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter or ASHRAE Standard 52.2-1999, Method of Testing General Ventilation Air-Cleaning Devices for Removal Efficiency by Particle Size when specifically set forth in these standards.

408.1.1 A filter gauge shall be installed across each filter bank serving central air systems. The gauge shall be red lined or a filter alarm light installed to signal when the recommended maximum static pressure drop has been reached.

408.1.2 Central air-handling systems are defined as any unit requiring duct work on the supply or inlet side that serve more than one room.

408.1.3 Filter banks shall be visually inspected for torn media and bypass in filter frames by means of a flashlight or equivalent, both with fans in operation and stopped. Tears in media and bypass in filter frames shall be eliminated in accordance with the manufacturer's directions and the requirements of the enforcing agency prior to commencing operation of the system.

408.1.4 Central air-handling systems shall be maintained in a reasonably clean condition during construction and shall be cleaned as necessary prior to replacement of temporary filter used during construction to ensure that clean air will be delivered to the occupied spaces.

408.1.5 Filter bank No. 1 shall be located upstream of the air-conditioning equipment. Filter bank No. 2 and filter bank No. 3 shall be located downstream of the supply fan and all cooling and humidification

equipment with efficiencies as indicated in Table 4-B or Table 4-C.

Exception: Dry steam-type humidifiers for local room humidity control may be installed in the supply air duct downstream of the final filter bank where designs are specifically approved by the enforcing agency.

408.1.6 Filter bank No. 2 and filter bank No. 3 media shall be rigid or supported (noncollapsing type) and shall operate on the principles of impingement, straining and diffusion.

408.2 Filters for Hospitals.

408.2.1 All air-ventilation systems shall comply with code requirements of this section and shall have filter bank efficiencies as listed in Table 4-B.

408.2.2 Noncentral recirculating air systems providing cooling to high heat producing equipment located in nonsensitive areas shall have a filter with 30 percent average efficiency based on ASHRAE Standard 52.1-1992 or a minimum efficiency reporting value (MERV) of 8 based on ASHRAE Standard 52.2-1999.

408.2.3 Noncentral air systems serving any areas not listed in Table 4-B shall be provided with filter arrangement and efficiency specifically approved by the enforcing agency.

408.2.4 Noncentral recirculating air handling systems, i.e., through-the-wall units, fan coil units, and heat pumps may be utilized for single patient rooms of one or more beds. Filtration for these units shall have a minimum weight arrestance value of 50 percent, based on ASHRAE Standard 52.1-1992 or a minimum efficiency reporting value (MERV) of 1, based on ASHRAE Standard 52.2-1999. The air ventilation system providing the minimum air changes of outdoor air shall comply with Table 4-B. These units may be used as recirculating units only. All outdoor air requirements shall be met by a separate central air handling systems.

408.3 Filters for Skilled Nursing Facilities, Intermediate Care Facilities and Correctional Treatment Centers.

408.3.1 The air ventilation systems shall comply with code requirements of this section for skilled nursing facilities, intermediate care facilities and correctional treatment centers and shall have filter bank efficiencies as listed in Table 4-C.

408.3.2 Noncentral air systems serving single patient rooms of one or more beds shall comply with Table 4-C.

408.3.3 Noncentral recirculating air-handling systems, i.e. through the wall units, may be utilized for each patient room with one or more beds. Filtration for these units shall have a minimum weight arrestance value of 50 percent, based on ASHRAE Standard 52.1-1992 or a minimum efficiency reporting value (MERV) of 1, based on