FOREWORD

Draft Addendum 62s. This addendum clarifies and updates requirements for equipment-related particle filtration. These requirements are intended to lower the level of particulate matter in the ventilation system where wet surfaces are present, thereby reducing the rate of dirt accumulation on ventilation system components, including ductwork. Dirt accumulation on wet surfaces provides a substrate that may lead to microbial growth which may in turn cause the ventilation system to become a source of contaminants. In addition to reducing the rate of accumulation of particulate matter, filtration also reduces the level of airborne particles that may be harmful to humans, such as airborne microorganisms and respirable particles. However, the removal of these potentially harmful particles is not the primary purpose of the requirements in this addendum.

NOTE: In the draft that follows, single underlines and single strikethroughs reflect changes that were part of the actual public review draft. Double underlines and double strikethroughs reflect changes made to the public review draft in response to public review comments.

Addendum 62*s*

Delete Section 5.8 from Standard 62-1999

~~5.8 Airborne particulate contaminants vary in size, as shown in Fig. 2. Microorganisms, dusts, fumes, smoke, and other particulate matter may be captured by air filters. Many bacteria (99% exceed 1 micrometer in size) are attached to larger particles such as human skin flakes. Viruses generally occur in clusters or in and on other particles. Lung-damaging particles that may be retained in the lungs are 0.2 to 5 micrometers in size (see Fig. 2). When it is necessary to remove particulate contaminants, air filters or dust collectors should be used. Dust collectors, not air filters, should be used where the dust loading equals or exceed 10 mg/m^3 (4 grains/100 ft^3). Air filters and dust collectors shall be selected for the particle size and loading encountered. Filters shall be tested in accordance with ASHRAE Standard 52-76 (Ref 8) or MIL Std 282 (Ref 9). Dust collectors may be wet, dry, or electrostatic as required by particle size and loading (see Table 1, Chapter 11, *ASHRAE Handbook - 1983 Equipment Volume* (Ref 10).~~

Add the following new Section 5.8

5.8 Particulate Matter Removal. Particulate matter filters or air cleaners having a minimum efficiency reporting value (MERV) of not less than 6 when rated in accordance with ASHRAE Standard 52.2-1999[33]~~, or a minimum dust spot efficiency not less than 25% efficiency when rated in accordance with ASHRAE 52.1[8]~~, shall be provided upstream of all cooling coils or other ~~condensate producing~~ devices with wetted surfaces through which air is supplied to an occupiable space. ~~[*Note: the reference to Standard 52.2 will be removed if Standard 52.2 has not been approved before this addendum is recommended for publication*]~~

Modify and add references as follows:

~~[8]ASHRAE Standard 52-76, *Method of Testing Air-Cleaning Devices Used in General Ventilation for Removing Particulate Matter*. American Society of Heating, Refrigerating, and Air-Conditioning Engineers, Inc., Atlanta. 1976.~~

[33]ASHRAE. 1999. *ASHRAE Standard 52.2, Method of Testing General Ventilation Air Cleaning Devices for Removal Efficiency by Particle Size*. American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. Atlanta.