Joint Committee Information Paper

News of events or activities related to the field of interest of the Joint Committee

Subject: Update/correct missing cabinet type in sections N-5.3.3.2.2 and N-5.3.3.2.4

Brief statement of information provided:

Add all applicable cabinet types for the constricted inflow method.

N-5.3.3.2.2 Method for Types A1, A2, B1, B2 and C1 ~~and B2~~ cabinets using a thermal anemometer to measure velocity through a constricted access opening to determine average inflow velocity:

Added type C1 to last sentence in section

N-5.3.3.2.4 Calculated method for Type B2 cabinets using an anemometer and pitot tube if applicable:

a) Turn on the cabinet downflow blower and exhaust system blower.

b) Set the sash at the height specified by the testing organization.

c) Measure and calculate the exhaust volume in accordance with the testing organization's verified methodology, or with ASHRAE standards for air velocity measurements in round or rectangular ducts, or with the *Industrial Ventilation Manual*.[3]

d) Measure the supply air velocity on a grid as specified on the data plate. The air measurement probe shall be held rigidly in a freestanding fixture (ring-stand and clamp) that permits accurate positioning and does not distort the airflow pattern (see Figure 26). The anemometer probe shall not be hand held. Average the velocity readings and multiply by the area in ft^2 (m^2) of the plane in which the velocities were measured to determine the total filtered supply air volume flow rate in ft^3/min (m^3/s).

e) Subtract the supply air volume rate in ft^3/min (m^3/s) from the total exhaust volume rate in ft^3/min (m^3/s); the difference represents the calculated inflow volume rate in ft^3/min (m^3/s).

f) Divide the calculated inflow volume rate by the area of the access opening in ft^2 (m^2) to determine the average inflow velocity in ft/min (m/s).

g) Include the following in reported data: individual exhaust velocity readings, calculated average exhaust velocity, exhaust duct area, calculated exhaust volume, individual supply velocity readings, average supply velocity, effective supply area, calculated supply air volume, area of the work access opening, calculated inflow air volume, calculated average inflow velocity, and methods used to determine them.

h) Reported values shall be:

- individual duct velocity readings;
- overall average of the duct velocity readings;
- calculated exhaust volume;
- duct size, shape and area;
- work access opening dimensions and area;
- dimensions and area of the supply velocity measurement location (used to determine supply volume);
- individual supply velocity readings (not to be confused with downflow velocities);
- calculated supply air velocity and volume;
- calculated inflow velocity and method used for calculations;
- correction factor used (if applicable);
- acceptance criteria for average inflow velocity;
- inflow velocity test method; and
- name of test (inflow velocity test).

Canopy-connected A1, A2 and C1 ~~and A2~~ cabinets shall be tested with a method that measures the inflow volume at the work access opening.

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