INTERPRETATION IC 62.1-2016-7 OF ANSI/ASHRAE STANDARD 62.1-2016 VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

Approved: June 23, 2019

Request from: Ken Loudermilk, Air Systems Components, 605 Shiloh Road, Plano, TX 75074.

Reference: This request for interpretation refers to the requirements presented in ANSI/ASHRAE Standard 62.1-2016, Section 3, regarding the definitions for *return air* and *recirculated air*.

<u>Background:</u> The definitions in Standard 62.1-2016 for *air*, *recirculated* and *air*, *return* as follows, are confusing when dealing with terminal units where room air induction is employed.

air, recirculated: air removed from a space and reused as supply air.

air, return: air removed from a space to be recirculated or exhausted.

Certain room air distribution terminals employ room air induction. This induction may be accomplished by an integral fan or a series of nozzles through which a ducted ventilation air mixture is injected at a relatively high velocity in order to induce air *from the space* through a heat transfer coil within the terminal where sensible heat is added or removed. An airflow rate similar to that of the ventilation air mixture is then *removed from the space* through a separate air inlet and transported either directly (by means of ductwork) or indirectly (by means of a common return air plenum or path) to the air handling unit for recirculation or exhaust.

If the interpretation below is correct, the definitions should be modified accordingly and/or Figure 3.1 should specifically include in room terminals (e.g. fan coil units, induction terminals and active chilled beams) that directly recirculate room air and mix it with the ducted (ventilation) air supply.

<u>Interpretation:</u> Air which is induced into the terminal and for mixing with the ducted air mixture is always defined as *recirculated air and not return air*. The air which is removed from the space and for transport to the air handling unit and/or exhaust purposes is always referred to as the *return air*.

Question: Is this interpretation correct?

Answer: Yes

<u>Comments:</u> Moving forward this committee will evaluate the definitions of *recirculated air*, *return air* and Figure 3.1 to make this clear in the future.