Interpretation IC 170-2008-1 of ANSI/ASHRAE/ASHE Standard 170-2008 Ventilation of Health Care Facilities

Date Approved: August 18, 2010

<u>Request from:</u> Ronald Lyon (<u>lyonrw@kjww.com</u>), KJWW Consulting Engineers, 623 26th Ave., Rock Island, IL 61201.

<u>Reference</u>: This request for interpretation refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2008, Table 7-1 note "u", regarding AII rooms.

Background: Due to the 2nd sentence of note "u" which states: "The design of AII rooms shall include the provision for normal patient care during periods not requiring isolation precautions." various state department of public health officials are requiring AII rooms to be switched to neutral pressure relative to the corridor in order for the hospital to assign normal acute care patients to the AII room. As long as the AII has a negative pressure relative to the adjacent corridor, the state department of public health officials will only allow infectious/ contagious patients to be assigned to AII rooms. Within these states, normal acute care patients are only allowed to be assigned to patient rooms that are neutral in pressure relative to the adjacent corridor. In the current 2010 Guidelines for Design and Construction of Health Care Facilities, paragraph 2.1-2.4.2.1(3) allows the use of AII rooms for normal acute care patients. Also in the 2010 Guidelines, paragraph 2.1-8.2.2.1(1) states the following: "Use of AII rooms for routine patient care during periods not requiring isolation precautions shall be permitted. Differential pressure requirements shall remain unchanged when the AII room is used for routine patient care."

Interpretation No.1: Table 7-1, note "u", requires all AII rooms to be neutral in pressure relative to the adjacent corridor in order for normal acute care patients to be assigned to those rooms, as interpreted by the various state department of public health officials.

Question No.1: Is this interpretation correct?

Answer No.1: No. The AII room must always be maintained at a negative pressure even when being used for normal acute care.

Interpretation No.2: The phrase "The design of AII rooms shall include the provision for normal patient care during periods not requiring isolation precations" intends for the rooms to be switched to a negative pressure mode when used for infectious/contagious patients and then switched to a neutral pressure mode (pressures relative to the adjacent corridor) when used for normal acute care patients.

Question No.2: Is this interpretation correct?

<u>Answer No.2</u>: No. This provision allows for the patient room door to remain open, for the audible alarm, if there is one, to be silenced.

• Please be advised that Addendum f is currently under Publication Public Review by SSPC170. Addendum "f" allows that "When the AII room is not utilized for airborne

infection isolation, the pressure relationship to adjacent areas, when measured with the door closed, shall remain unchanged and the minimum total air change rate shall be 6 ach." Addendum "f" also states that "Switching controls for rooms with reversible airflow provisions shall not be permitted."

Comments: According to the clinical community, there is no increased risk of infection when a normal patient is in a room that is under a negative pressure to the corridor. The ventilation system supplying air to the corridor is filtered at the same MERV level as the air being supplied to the airborne infection isolation room. It must be noted that the committee is still adamant about not permitting switchable systems in rooms used for airborne infection isolation, even those controls that would take the room from negative to equal.