

**Interpretation IC 170-2013-7 of  
ANSI/ASHRAE/ASHE Standard 170-2013  
Ventilation of Health Care Facilities**

Date Approved: June 30, 2015

**Request from:** Travis English, Kaiser Permanente, 1800 Harrison Street, Oakland, CA 94612.

**Reference:** This request for interpretation refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2013, Table 7.1, regarding design temperature range.

**Background:** Table 7.1, Column 8, lists design temperature ranges. For the three spaces in this interpretation request (under **Central Medical and Surgical Supply**), *Soiled or decontamination room* (entry 38), *Clean workroom* (entry 39), and *Sterile storage* (entry 40), the temperature range is 72°F-78°F (22°C-26°C). These temperatures are not specifically cited to a particular body of evidence. Per *IC 170-2013-2 of ANSI/ASHRAE/ASHE Standard 170-2013*, these temperature ranges do not provide ‘Thermal Comfort for Human Occupancy’ (i.e. compliance to ASHRAE Standard 55-2013).

Another ANSI standard, ANSI/AAMI ST79, authored by the Association for the Advancement of Medical Instrumentation (AAMI) calls for a temperature range of 60-65 °F for “decontamination area” (§3.3.6.5). The AAMI also does not specifically cite to a particular body of evidence. However, it includes a “Rationale” paragraph, which discusses comfort, clothing, and bioburden of bacteria.

Recent literature studies, cited by ASHRAE, and published by FGI/ASHE, seem largely to debunk ranges of these types as optimal for biological growth, hinting that variability in bacterial and virus survival responses to temperature (and humidity) are too broad to generalize into specific ranges.

ASHRAE is aware of the temperature ranges in ANSI/AAMI ST79, and maintains that a design temperature range of 72°F-78°F, as listed in Table 7.1 for *Soiled or decontamination room* (entry 38), *Clean workroom* (entry 39), and *Sterile storage* (entry 40), does not impose an unacceptable risk of bacteriological contamination.

**Interpretation:** A design temperature range of 72°F-78°F (22°C-26°C) in Table 7.1 for these spaces types, *Soiled or decontamination room* (entry 38), *Clean workroom* (entry 39), and *Sterile storage* (entry 40), does not impose an unacceptable risk of bacteriological contamination.

**Question:** Is this interpretation correct?

**Answer:** Yes.

**Comments:** We have discussed this issue with the AAMI ST79 committee and are pursuing a temperature range change to Standard 170 that will treat these spaces more similarly to the way ST79 treats them.