

**Interpretation IC 170-2017-14 of  
ANSI/ASHRAE/ASHE Standard 170-2017  
Ventilation of Health Care Facilities**

Date Approved: December 6, 2023

**Request from:** Brian Worthen, Alvine Engineering, 1001 W. Wilshire Blvd, Suite 102, Oklahoma City, Oklahoma 73116.

**Reference:** This request for interpretation refers to the requirements in ANSI/ASHRAE/ASHE Standard 170-2017, Section 6.7.1 and Tables 7.1 and 8.1, regarding requirements for fully ducted return air or exhaust air systems in emergency department exam and treatment rooms.

**Background:** An existing admissions office area located in a hospital is being converted to emergency department exam and treatment rooms with ligature-resistant design for pediatric patients. The project renovation area also includes additional play areas and offices, but does not include other types of patient care areas such as triage or procedure rooms. The air handling unit serves the renovation project area only and utilizes a plenum return system.

Section 6.7.1 of ASHRAE/ASHE Standard 170 defines requirements for fully ducted return or exhaust systems in healthcare environments. Fully ducted return and exhaust systems are required for spaces with pressurization requirements as defined in Tables 7.1, 8.1, and 9.1 as well as specifically listed surgery and critical-care patient care areas: recovery rooms, critical and intensive care areas, intermediate care areas, and wound intensive care units (burn units). Lastly, Section 6.7.1 states that patient care areas in inpatient facilities shall use fully ducted return air and exhaust air systems.

Emergency department treatment and exam rooms do not have space pressurization requirements in Tables 7.1, 8.1, or 9.1. Moreover, the list of surgery and critical-care patient areas provided in Section 6.7.1 does not include emergency department treatment and exam rooms.

Emergency departments are not inpatient services. A patient presenting to a hospital is considered an outpatient if they are receiving emergency department services or observation services. Moreover, the Standard's definition for a facility is "a discrete physical entity composed of various functional units as described in the FGI Guidelines; this may be a portion of a building or a portion of a floor within a building.", which recognizes that outpatient facilities may exist within a larger, mixed-use building providing a range of services and functions.

**Interpretation:** ASHRAE/ASHE Standard 170 does not require emergency department treatment or exam rooms to be served by fully ducted return air systems.

**Question:** Is this interpretation correct?

**Answer:** No

**Comments:** Exam rooms and treatment rooms in the renovated spaces as mentioned above are extension of the Emergency Department. There is also mention of play area which could be just extension of ED waiting. As such when someone shows up to an ED, the nature of ailment is not known and thus it is imperative that all air in the space has a way of getting filtered to minimize

infection risks and the pressure relationships (as an extension of waiting) be maintained. The best way to ensure this is through ducted systems.