

ADDENDA

**ANSI/ASHRAE/ASHE Addendum e to
ANSI/ASHRAE/ASHE Standard 170-2013**

Ventilation of Health Care Facilities

Approved by ASHRAE on November 28, 2014; by ASHE on November 17, 2014; and by the American National Standards Institute on December 1, 2014.

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FOREWORD

This addendum clarifies that for spaces with pressure relationship requirements in Table 7.1, "Design Parameters," controls shall not be allowed that change the pressure relationship between positive and negative. This requirement was previously only applicable to All Rooms.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

Addendum e to Standard 170-2013

Relocate the prohibition against switching pressure relationships for All Rooms from footnote u of Table 7.1 to a general requirement in Section 7.1(a)(3) as shown. The remainder of Section 7.1 is unchanged.

7.1 General Requirements. The following general requirements shall apply for space ventilation:

a. Spaces shall be ventilated according to Table 7.1.

[. . .]

3. For design purposes, the minimum number of total air changes indicated shall be either supplied for positive pressure rooms or exhausted for negative pressure rooms. Spaces that are required in Table 7.1 to be at a negative pressure relationship and are not required to be exhausted shall utilize the supply airflow rate to compute the minimum total air changes per hour required. For spaces that require a positive or negative pressure relationship, the number of air changes can be reduced when the space is unoccupied, provided that the required pressure relationship to adjoining spaces is maintained while the space is unoccupied and that the minimum number of air changes indicated is re-established anytime the space becomes occupied. Controls intended to switch the required pressure relationships between spaces from positive to negative, and vice versa, shall not be permitted. Air change rates in excess of the minimum values are expected in some cases in order to maintain room temperature and humidity conditions based upon the space cooling or heating load.

[. . .]

Revise Table 7.1 as shown below. The remainder of Table 7.1 is unchanged.

TABLE 7.1 Design Parameters

Function of Space	Pressure Relationship to Adjacent Areas (n)	Minimum Outdoor ach	Minimum Total ach	All Room Air Exhausted Directly to Outdoors (j)	Air		Design Temperature (l), °F/°C
					Recirculated by Means of Room Units (a)	Design Relative Humidity (k), %	
SURGERY AND CRITICAL CARE							
Operating room (Class B and C), (m),(#), (o)	Positive	4	20	N/R	No	20-60	68-75/20-24
Operating/surgical cystoscopic rooms, (m), (#), (o)	Positive	4	20	N/R	No	20-60	68-75/20-24
Delivery room (Caesarean) (m),(#), (o)	Positive	4	20	N/R	No	20-60	68-75/20-24
DIAGNOSTIC AND TREATMENT							
Bronchoscopy, sputum collection, and pentamidine administration (#)	Negative	2	12	Yes	No	N/R	68-73/20-23
Autopsy room (#)	Negative	2	12	Yes	No	N/R	68-75/20-24

[...] n. If pressure-monitoring device alarms are installed, allowances shall be made to prevent nuisance alarms. Short-term excursions from required pressure relationships shall be allowed while doors are moving or temporarily open. Simple visual methods such as smoke trail, ball-in-tube, or flutterstrip shall be permitted for verification of airflow direction.

[...] u. The AII room described in this standard shall be used for isolating the airborne spread of infectious diseases, such as measles, varicella, or tuberculosis. Supplemental recirculating devices using HEPA filters shall be permitted in the AII room to increase the equivalent room air exchanges; however, the minimum outdoor air changes of Table 7.1 are still required. AII rooms that are retrofitted from standard patient rooms from which it is impractical to exhaust directly outside may be recirculated with air from the AII room, provided that the air first passes through a HEPA filter. 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. ~~Switching controls for reversible airflow provisions shall not be permitted.~~

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ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the standards and guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive technical committee structure, continue to generate up-to-date standards and guidelines where appropriate and adopt, recommend, and promote those new and revised standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating standards and guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

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