



ADDENDA

**ANSI/ASHRAE/ASHE Addendum I to
ANSI/ASHRAE/ASHE Standard 170-2008**

Ventilation of Health Care Facilities

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FOREWORD

This addendum makes the airflow requirements of Section 7.4.1 apply to both Caesarian delivery rooms and operating/surgical cystoscopic rooms. Both of these spaces are typically already programmed as Class B surgeries. This addendum also provides additional entries for Table 7-1.

Note: *This addendum makes proposed changes to the current standard. These changes are indicated in the text by underlining (for additions) and ~~striketrough~~ (for deletions), except where the reviewer instructions specifically describe some other means of showing the changes.*

Addendum I to Standard 170-2008

[Revise Section 7.4.1 as shown. The requirements of this section are unchanged by this addendum.]

7.4 Surgery Rooms

7.4.1 Class B and C Operating Rooms, Operating/Surgical Cystoscopic Rooms, and Caesarean Delivery Rooms.

These Operating rooms shall be maintained at a positive pressure with respect to all adjoining spaces at all times. A pressure differential shall be maintained at a value of at least +0.01 in. wc (2.5 Pa). Each operating room shall have individual temperature control. These Operating rooms shall be provided with primary supply diffusers that are designed as follows:

- a. The airflow shall be unidirectional, downwards, and the *average velocity* of the diffusers shall be 25 to 35 cfm/ft² (127 L/s/m² to 178 L/s/m²). The diffusers shall be concentrated to provide an airflow pattern over the patient and surgical team. (For further information, see Memarzadeh [2002] and Memarzadeh [2004] in Informative Annex B: Bibliography.)
- b. The area of the primary supply diffuser array shall extend a minimum of 12 in. (305 mm) beyond the footprint of the surgical table on each side. No more than 30% of the primary supply diffuser array area shall be used for non-diffuser uses such as lights, gas columns, etc. Additional supply diffusers may be required to provide additional ventilation to the operating room to achieve the environmental requirements of Table 7.1 relating to temperature, humidity, etc.

The room shall be provided with at least two low sidewall return or exhaust grilles spaced at opposite corners or as far apart as possible, with the bottom of these grilles installed approximately 8 in. (203 mm) above the floor.

[Add the following new entries to Table 7-1. See the current standard—as modified by any published addenda—for the remainder of Table 7-1. See published standard for applicable footnotes.]

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 Recirculated by Means of Room Units (a)	Design Relative Humidity (k), %	Design Temperature (l), °F/°C
DIAGNOSTIC AND TREATMENT							
Dialysis treatment area	<u>N/R</u>	<u>2</u>	<u>6</u>	<u>N/R</u>	<u>N/R</u>	<u>N/R</u>	<u>72–78/22–26</u>
Dialyzer reprocessing room	<u>Negative</u>	<u>N/R</u>	<u>10</u>	<u>Yes</u>	<u>No</u>	<u>N/R</u>	<u>N/R</u>
Nuclear medicine hot lab	<u>Negative</u>	<u>N/R</u>	<u>6</u>	<u>Yes</u>	<u>No</u>	<u>N/R</u>	<u>70–75/21–24</u>
Nuclear medicine treatment room	<u>Negative</u>	<u>2</u>	<u>6</u>	<u>Yes</u>	<u>N/R</u>	<u>N/R</u>	<u>70–75/21–24</u>

POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted standards and the practical state of the art.

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.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

