ADDENDA

ANSI/ASHRAE/ASHE Addendum f
to ANSI/ASHRAE/ASHE Standard 170-2013

Ventilation of Health Care Facilities

Approved by ASHRAE on May 31, 2016; by the American Society for Healthcare Engineering on May 23, 2016; and by the American National Standards Institute on June 1, 2016.

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FOREWORD

This addenda clarifies requirements for the primary supply diffuser array for the operating room primary diffuser.

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 f to Standard 170-2013

Revise Section 7.4.1 as follows. Note that the sentence beginning "Additional supply diffusers may be..." is relocated from the last sentence in Subsection 7.4.1(b) to its own subsection.

7.4.1 Operating Rooms ~~(Class B and C)~~, Operating/Surgical Cystoscopic Rooms, and Caesarean Delivery Rooms. These 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 room shall have individual temperature control. These rooms shall be provided with a primary supply diffusers array that ~~are~~ is designed as follows:

a. The airflow shall be unidirectional, downwards, and the average velocity of the diffusers shall be 25 to 35 cfm/ft^2 (127 to 178 L/s/m^2). The diffusers shall be concentrated to provide an airflow pattern over the patient and surgical team.

Informative Note to Section 7.4.1(a): For further information, see Memarzadeh and Manning [2002] and Memarzadeh and Jiang [2004] in Informative Appendix B.

b. The coverage area of the ~~p~~Primary ~~s~~Supply ~~d~~Diffuser ~~a~~Array shall extend a minimum of 12 in. (305 mm) beyond the footprint of the surgical table on each side. Within the portion of the primary supply diffuser array that consists of an area encompassing 12 in. (305 mm) on each side of the footprint of the surgical table, ~~N~~no more than 30% of this portion of the primary supply diffuser array area shall be used for nondiffuser uses such as lights, gas columns, equipment booms, access panels, sprinklers, etc.

Additional supply diffusers ~~may be required~~ shall be permitted within the room, outside of the primary supply diffuser array, to provide additional ventilation to the operating room to achieve the environmental requirements of Table 7.1 relating to temperature, humidity~~, etc.~~ or a portion of the required air change rates.

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.

Exception: In addition to the required low return (or exhaust) air grilles, such grilles may be placed high on the walls.

Revise Table 6.7.2 as follows. The remainder of Table 6.7.2 is unchanged.

TABLE 6.7.2 Supply Air Outlets

Space Designation (According to Function)	Supply Air Outlet Classification[a]
Operating rooms [b], ~~p~~Procedure rooms	~~Primary~~ ~~s~~Supply diffusers within the primary supply diffuser array: Group E, nonaspirating ~~a~~Additional supply diffusers within the room:~~,~~ Group E

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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.

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

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