



**BSR/ASHRAE/ASHE Addendum m  
to ANSI/ASHRAE/ASHE Standard 170-2021**

**Public Review Draft**

**Proposed Addendum m to  
Standard 170-2021, Ventilation of  
Health Care Facilities**

**Third Public Review (April 2025)**  
**(Draft shows Proposed Independent Substantive Changes  
to Previous Public Review Draft)**

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**(This foreword is not part of this standard. It is merely informative and does not contain requirements necessary for conformance to the standard. It has not been processed according to the ANSI requirements for a standard and may contain material that has not been subject to public review or a consensus process. Unresolved objectors on informative material are not offered the right to appeal at ASHRAE or ANSI.)**

## FOREWORD

*Proposed Addendum m revises Tables 7-1, 8-1, 8-2 and 9-1 to incorporate types of room units that are allowable for each space type. This will provide clarity and consistency within this standard. This addendum comprises the following general edits:*

- *New definition for room unit.*
- *Revisions to Tables 7-1, 8-1, 8-2 and 9-1 modifying the general requirement for recirculating room units to align with the definition and specify the type of room unit allowable in each space.*

*Revisions to the requirements for air change rate provisions with respect to room units.*

***[Note to Reviewers: This public review draft makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and strikethrough (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the current standard are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed changes.]***

## Addendum m to 170-2021

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***Revise Section 6.5.3 as shown. The remainder of Section 6.5 is unchanged.***

### 6.5 Heating and Cooling Systems. ...

**6.5.3 Radiant Heating Systems.** If radiant heating is provided for an AII room, a protective environment room, a wound intensive care unit (burn unit), an OR, or a procedure room, either flat and smooth radiant ceiling or wall panels with exposed cleanable surfaces or radiant floor heating shall be used. Gravity-type heating or cooling units, such as radiators or convectors, shall not be used in ~~ORs and other special care~~ areas where FGI Guidelines require an integral coved wall base.

**Informative Note:** Areas with integral coved wall base are listed in Guidelines for the Design and Construction of Hospitals Section 2.1-7.2.3.1(7)(a) and Guidelines for the Design and Construction of Outpatient Facilities Section 2.1-7.2.3.1(6)(a).

***Revise Section 7.1.a.5 as shown. The remainder of Section 7.1 is unchanged.***

### 7.1 General Requirements. ...

- a. Spaces shall be ventilated according to Table 7-1.  
...
5. For spaces where Table 7-1 permits air to be recirculated by room units, the portion of the minimum total air changes per hour required for a space that is greater than the minimum outdoor air changes per hour required component may be provided by recirculating *room units*.  
Such *room units* shall

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- i. not receive nonfiltered, nonconditioned outdoor air;
- ii. serve only a single space; and
- iii. provide a minimum MERV 8 filter for airflow passing over any surface that is designed to condense water. This filter shall be located upstream of any such cold surface so that all of the air passing over the cold surface is filtered.
- iv. not be gravity-type heating or cooling units, such as radiators, ~~or~~ convectors, or passive chilled beams.

...

***Revise Table 7-1 as shown below. The remainder of Table 7-1 and notes are unchanged.***

Table 7-1 Design Parameters—Inpatient Spaces

Function of Space (ee)	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 by Type (a)	Unoccupied Turndown	Minimum Filter Efficiencies (cc)	Design Relative Humidity (k), %	Design Temperature (l), °F/°C
PATIENT SUPPORT FACILITIES									
Food preparation areas (FGI 2.1–4.3.2) (i)	NR	2	10	NR	<del>A, B, C, D</del> A, B	Yes	MERV-8	NR	72–78/22–26

***Revise Section 8.1.a.5 as shown. The remainder of section 8.1 is unchanged.***

## **8. SPACE VENTILATION—OUTPATIENT SPACES...**

### **8.1 Specialized Outpatient Facility Requirements. ...**

- a. Spaces shall be ventilated according to Table 8-1.

...

5. For spaces where Table 8-1 permits air to be recirculated by room units, the portion of the minimum total air changes per hour required for a space that is greater than the minimum outdoor air changes per hour required component may be provided by recirculating *room units*. Such *room units* shall
- i. not receive nonfiltered, nonconditioned outdoor air;
  - ii. serve only a single space; and
  - iii. provide a minimum MERV 8 filter for airflow passing over any surface that is designed to condense water. This filter shall be located upstream of any such cold surface, so that all of the air passing over the cold surface is filtered.
  - iv. not be gravity-type heating or cooling units, such as radiators, ~~or~~ convectors, or passive chilled beams.

...

***Revise Table 8-1 as shown below. The remainder of Table 8-1 and notes are unchanged.***

Table 8-1 Design Parameters—Specialized Outpatient Spaces

Function of Space (f)	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 by type (a)	Minimum Filter Efficiencies (c)	Design Relative Humidity (k), %	Design Temperature (l), °F/°C
DIAGNOSTIC AND TREATMENT								
Endoscopy procedure room (FGI 2.9–3.2) (h)	NR	2	6	NR	A, B, C, D, <u>A, B</u>	MERV-8	Max 60	68–73/20–23
STERILE PROCESSING (aa)								
Supply receiving (FGI 2.1–4.3.2.4)	Negative	NR	10	Yes	<del>NR</del> <u>A, B</u>	MERV-8	NR	NR

...

***Revise Section 8.2.a.5 as shown. The remainder of section 8.2 is unchanged***

## **8.2 General Outpatient Facility Requirements...**

- a. Spaces shall be ventilated according to Table 8-2.

...

5. For spaces where Table 8-2 permits air to be recirculated by *room units*, the portion of the minimum total air changes per hour required for a space that is greater than the minimum outdoor air changes per hour required component may be provided by recirculating room HVAC units.

Such *room units* shall

- i. not receive nonfiltered, nonconditioned outdoor air;
- ii. provide the manufacturer's recommended filter (or MERV-8 as a minimum) for airflow passing over any surface that is designed to condense water. This filter shall be located upstream of any such cold surface, so that all of the air passing over the cold surface is filtered.
- iii. not be gravity-type heating or cooling units, such as radiators, ~~or~~ convectors, or passive chilled beams.

...

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***Revise Section 9.1.a.5 as shown below. The remainder of section 9.1 is unchanged.***

## **9. SPACE VENTILATION—RESIDENT HEALTH, CARE, AND SUPPORT SPACES...**

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

- a. ...

...

5. For spaces where Table 9-1 permits air to be recirculated by *room units*, the portion of the minimum total air changes per hour required for a space that is greater than the minimum outdoor air changes per hour required component may be provided by recirculating *room units*.

Such *room units* shall

- i. not receive nonfiltered, nonconditioned outdoor air;
- ii. serve only a single space; and
- iii. provide, as a minimum, the manufacturer's recommended filter for airflow passing over any surface that is designed to condense water. This filter shall be located upstream of any such cold surface, so that all of the air passing over the cold surface is filtered.
- iv. not be gravity-type heating or cooling units, such as radiators, ~~or~~ convectors, or passive chilled beams.

...