ANSI/ASHRAE/ASHE Addenda x, z, and ab to
ANSI/ASHRAE/ASHE Standard 170-2008

Ventilation of
Health Care Facilities

Approved by the ASHRAE Standards Committee on June 22, 2013; by the ASHRAE Board of Directors on June 26, 2013; by the ASHE Board of Directors on July 3, 2013; and by the American National Standards Institute on July 24, 2013.

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ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review. ASHRAE Standards are prepared by a Project Committee appointed specifically for the purpose of writing the Standard. The Project Committee Chair and Vice-Chair must be members of ASHRAE; while other committee members may or may not be ASHRAE members, all must be technically qualified in the subject area of the Standard. Every effort is made to balance the concerned interests on all Project Committees.

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In referring to this Standard or Guideline and in marking of equipment and in advertising, no claim shall be made, either stated or implied, that the product has been approved by ASHRAE.
FOREWORD

This addendum adds filtration requirements, in Table 6-1 (Minimum Filter Efficiencies), for inpatient hospice and assisted-living facilities. This addendum also adds design parameters, in Table 7-1 (Design Parameters), for resident unit corridors.

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 x to Standard 170-2008

Revise Table 6-1 as shown. The remainder of Table 6-1 is unchanged.

### TABLE 6-1 Minimum Filter Efficiencies

<table>
<thead>
<tr>
<th>Space Designation (According to Function)</th>
<th>Filter Bank Number 1 (MERV)&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Filter Bank Number 2 (MERV)&lt;sup&gt;a&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resident care, treatment, and support areas in Inpatient Hospice Facilities</td>
<td>13</td>
<td>N/R</td>
</tr>
<tr>
<td>Resident care, treatment, and support areas in Assisted Living Facilities</td>
<td>7</td>
<td>N/R</td>
</tr>
</tbody>
</table>

Revise Table 7-1 as shown. The remainder of Table 7-1 is unchanged.

### TABLE 7-1 Design Parameters

<table>
<thead>
<tr>
<th>Function of Space</th>
<th>Pressure Relationship to Adjacent Areas (n)</th>
<th>Minimum Outdoor ACH</th>
<th>Minimum Total ACH</th>
<th>All Room Air Exhausted Directly to Outdoors (j)</th>
<th>Air Recirculated by Means of Room Units (a)</th>
<th>RH (k), %</th>
<th>Design Temperature (l), °F (°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>NURSING FACILITY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Resident unit corridor</td>
<td>N/R</td>
<td>N/R</td>
<td>4</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
<td>N/R</td>
</tr>
</tbody>
</table>
(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

This addendum clarifies requirements for an Emergency Department examination/treatment room in Table 7-1 (Design Parameters). The function of the Emergency Department examination/treatment room is described in FGI-2010 paragraph 2.2–3.1.3.6.

Note: This addendum makes proposed changes to the current standard. 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.

Addendum z to Standard 170-2008

Revise Table 7-1 as shown below. Table 7-1 and the notes were modified by several addenda to Standard 170-2008 currently published for free on the ASHRAE website at www.ashrae.org/standards-research—technology/standards-addenda. The remainder of Table 7-1 is unchanged.
### TABLE 7.1  Design Parameters

<table>
<thead>
<tr>
<th>Function of Space</th>
<th>Pressure Relationship to Adjacent Areas (n)</th>
<th>Minimum Outdoor ach</th>
<th>Minimum Total ach</th>
<th>All Room Air Exhausted Directly to Outdoors (j)</th>
<th>Air Recirculated by Means of Room Units (a)</th>
<th>RH (k), (%)</th>
<th>Design Temperature (l), (°F/°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td>SURGERY AND CRITICAL CARE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emergency Department exam/treatment room (p)</td>
<td>N/R</td>
<td>2</td>
<td>6</td>
<td>N/R</td>
<td>N/R</td>
<td>max 60</td>
<td>70–75/21–24</td>
</tr>
</tbody>
</table>
FOREWORD

This addendum clarifies the Table 7-1 (Design Parameters) minimum requirements for patient rooms. The patient room table entry with footnote (s) previously allowed 4 minimum total ach for this space with the use of supplemental heating and/or cooling systems. The patient room requirements have been clarified such that 4 minimum total ach is the space requirement regardless of the use of supplemental heating and/or cooling systems. The last sentence of footnote (s) was not revised by this addendum; it was relocated to a new footnote (x) and reapplied to the same table entry for patient rooms.

Note: This addendum makes proposed changes to the current standard. 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.

Addendum ab to Standard 170-2008

Revise Table 7-1 and its notes as shown below. Table 7-1 footnote s was modified by Addenda b and g to Standard 170-2008 currently published for free on the ASHRAE website at www.ashrae.org/standards-research-technology/standards-addenda. The remainder of Table 7-1 is unchanged.
**TABLE 7.1 Design Parameters**

<table>
<thead>
<tr>
<th>Function of Space</th>
<th>Pressure Relationship to Adjacent Areas (n)</th>
<th>Minimum Outdoor ach</th>
<th>Minimum Total ach</th>
<th>All Room Air Exhausted Directly to Outdoors (j)</th>
<th>Air Recirculated by Means of Room Units (a)</th>
<th>RH (k), (%)</th>
<th>Design Temperature (l), (°F/°C)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INPATIENT NURSING</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Patient room (s)</td>
<td>N/R</td>
<td>2</td>
<td>6 (y)</td>
<td>N/R</td>
<td>N/R</td>
<td>max 60</td>
<td>70–75/21–24</td>
</tr>
</tbody>
</table>

s. For patient rooms, intermediate care, labor/delivery/recovery rooms, and labor/delivery/recovery/postpartum rooms, four total ach shall be permitted when supplemental heating and/or cooling systems (radiant heating and cooling, baseboard heating, etc.) are used. For single-bed patient rooms using Group D diffusers, a minimum of six total air changes per hour shall be provided and calculated based on the volume from finished floor to 6 ft (1.83 m) above the floor.

y. For single-bed patient rooms using Group D diffusers, a minimum of six total air changes per hour shall be provided and calculated based on the volume from finished floor to 6 ft (1.83 m) above the floor.
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.