
Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings

The Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. Instructions for how to submit a change can be found on the ASHRAE® website (www.ashrae.org/continuous-maintenance).

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ISSN 1041-2336
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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. The Senior Manager of Standards of ASHRAE should be contacted for
a. interpretation of the contents of this Standard,
b. participation in the next review of the Standard,
c. offering constructive criticism for improving the Standard, or
d. permission to reprint portions of the Standard.

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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.
Addendum bx updates informative references in Appendix G to their most recent versions and adds new informative references relevant to Section 8.4.2.1.2 and Section 9.4.1.4.4, “Product Life Cycle.”

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 bx to Standard 189.1-2017

### Modify Section 4.3.3 as shown.

4.3.3 Informative Appendices. The informative appendices to this standard, and informative notes located within this standard, contain additional information that users of this standard may find useful and are not mandatory or part of this standard.

Modify Appendix G, “Informative References,” as shown. (Table appears on next page.)

### INFORMATIVE APPENDIX G

**INFORMATIVE REFERENCES**

This appendix contains informative references for the convenience of users of this standard and to acknowledge source documents when appropriate. Section numbers indicate the relevant sections in this document.
<table>
<thead>
<tr>
<th>Reference</th>
<th>Title</th>
<th>Section</th>
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<tr>
<td>ASHRAE 1791 Tullie Circle NE Atlanta, Georgia 30329, United States</td>
<td>HVAC Applications Appendix F</td>
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<td>ASHRAE Handbook, 2015-2019</td>
<td>Ventilation for Acceptable Indoor Air Quality Table 10.3.1.4</td>
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<td>ASHRAE Standard 62.1-2016 (Appendix C)</td>
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<td>ASTM International 100 Barr Harbor Dr. West Conshohocken, PA 19428-2959,</td>
<td>Standard Practice for Selection of Water Vapor Retarders for Thermal</td>
<td>8.3.6</td>
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<tr>
<td>United States 1-610-832-9585; <a href="http://www.astm.org">www.astm.org</a></td>
<td>Insulation, Appendix X1 Problem Analysis</td>
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<td>ASTM E1477 - 98a (2013)- (2017)e1</td>
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<td>BUS Methodology</td>
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<tr>
<td>California Environmental Protection Agency Office of Environmental Health Hazard Assessment Post Office Box 4010 Sacramento, CA 95812-4010, United States 1-916-324-7572; <a href="http://www.oehha.ca.gov">www.oehha.ca.gov</a></td>
<td>All OEHHA Acute, 8-hour and Chronic Reference Exposure Levels (chRELs) as of June 2014 8.4.2, 8.5.2</td>
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<td>Carpet and Rug Institute 730 College Drive Dalton, Georgia 30720, United</td>
<td>Green Label Plus (<a href="https://carpet-rug.org/testing/green-label-plus">https://carpet-rug.org/testing/green-label-plus</a>) 8.4.2.3</td>
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<tr>
<td>States 1-706-278-3176; <a href="http://www.carpet-rug.org">www.carpet-rug.org</a></td>
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<td>Center for the Built Environment</td>
<td></td>
<td>10.3.2.1.5</td>
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<td>University of California, 390 Wurster Hall #1839 Berkeley, CA 94720-1839</td>
<td>Indoor Environmental Quality (IEQ) SurveyTM 10.3.2.1.5</td>
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<tr>
<td>(510) 642-4950; <a href="http://www.cbe.berkeley.edu">http://www.cbe.berkeley.edu</a></td>
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<td>Illuminating Engineering Society</td>
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<td>120 Wall Street, Floor 17 New York, NY 10005-4001, United States 1-212-248-5017; <a href="http://www.ies.org">www.ies.org</a></td>
<td>Model Lighting Ordinance (MLO) 5.3.6</td>
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<td>IES HB-10-11</td>
<td>The Lighting Handbook: Reference and Application 7.4.6, 8.3.5</td>
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<td>International Code Council, Inc. (ICC) 500 New Jersey Ave., NW 6th Floor</td>
<td></td>
<td>Appendix H</td>
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<td>Washington, DC 20001, United States <a href="https://www.iccsafe.org/">https://www.iccsafe.org/</a></td>
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<td>IECC-20182021</td>
<td>International Energy Conservation Code</td>
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<td><strong>National Institute of Standards and Technology (NIST)</strong>&lt;br&gt;100 Bureau Drive&lt;br&gt;Gaithersburg, MD 20899&lt;br&gt;1-301-975-2000; <a href="https://ws680.nist.gov/Bees2">https://ws680.nist.gov/Bees2</a></td>
<td>Building for Environmental and Economic Sustainability (BEES)</td>
<td>9.4.1.4.4</td>
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<td><strong>UL Greenguard Gold</strong>&lt;br&gt;2211 Newmarket Parkway, #110&lt;br&gt;Marrietta, GA 30067, United States&lt;br&gt;1-800-427-9681; <a href="http://www.ul.com/environment">www.ul.com/environment</a></td>
<td>Greenguard Certification Program for Chemical Emissions for Building Materials, Finishes and Furnishing</td>
<td>8.4.2, 8.5.2</td>
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<td>Greenguard Certification Program Method for Measuring and Evaluating Chemical Emissions from Building Materials, Finishes and Furnishings</td>
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<td><strong>Usable Buildings Trust</strong>&lt;br&gt;Occupant Satisfaction Evaluation Survey</td>
<td>EcoLogo Sustainability for Adhesives</td>
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<td><a href="http://www.busmethodology.org.uk">http://www.busmethodology.org.uk</a></td>
<td>10.3.2.1.5</td>
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</table>
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.
Standard 189.1 and the International Green Construction Code
Standard 189.1 serves as the complete technical content of the International Green Construction Code® (IgCC). The IgCC creates a regulatory framework for new and existing buildings, establishing minimum green requirements for buildings and complementing voluntary rating systems. For more information, visit www.iccsafe.org.

About ASHRAE
Founded in 1894, ASHRAE is a global professional society committed to serve humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration, and their allied fields.

As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

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