

**ERRATA SHEET FOR  
ANSI/ASHRAE/USGBC/IES STANDARD 189.1-2011  
Standard for the Design of High-Performance Green Buildings  
Except Low-Rise Residential Buildings**

**March 8, 2018**

The corrections listed in this errata sheet apply to ANSI/ASHRAE/USGBC/IES Standard 189.1-2011. The first printing is identified on the outside back cover as “ISSN 1041-2336 Product Code: 86604 12/11”, the second printing is identified as “Product code: 86604 3/12 *Errata noted in the list dated 3/6/12 have been corrected.*”, and the third printing is identified as “Product code: 86604 8/12 *Errata noted in the list dated 5/2/12 have been corrected.*” Shaded items have been added since the previously published errata sheet dated May 8, 2013 was distributed. Items identified with an asterisk “\*” apply only to the first printing; these corrections have already been incorporated into the second printing and the third printing. Items identified with “\*\*” apply only to the first printing; these corrections have already been incorporated into the second and third printing. Items identified with “\*\*\*” apply to ALL printings.

**NOTICE:** ASHRAE now has a list server for Standing Standard Project Committee 189.1 (SSPC 189.1). Interested parties can now subscribe and unsubscribe to the list server and be automatically notified via e-mail when activities and information related to the Standard is available. To sign up for the list server please visit **Project Committee List Servers for Standard** on the Technology / Standards section of the ASHRAE website at <https://www.ashrae.org/technical-resources/standards-and-guidelines/project-committee-list-servers>.

**Page(s)    Erratum**

**15\*\*    5.1 Scope.** Make the following corrections to Section 5.1.  
*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

**5. SITE SUSTAINABILITY**

**5.1 Scope.** This section addresses requirements for *building projects* that pertain to *site selection, site development, mitigation of heat island effect, ~~and~~ light pollution reduction and mitigation of transportation impacts.*

**16\*\*    5.3.3.2 Backlight and Glare.** In item b of Section 5.3.3.2 change “luminaries” to “luminaires”.

**16\*\*    5.3.3.3 Uplight.** In item a of Section 5.3.3.3 change “luminaries” to “luminaires”.

**17\*\*    5.3.5.1.1 Walkways.** In the first sentence of Section 5.3.5.1.1 change “extents” to “extends”.

**27\*    7.4.4.2 Service Hot-Water Piping Insulation.** Delete Section 7.4.4.2 and renumber the existing Section 7.4.4.3 as shown below. Note that Section 7.4.4.2 refers to Section 7.4.3.11 for requirements for pipe insulation but Section 7.4.3.11 was previously deleted and there are no longer any requirements for service hot-water pipe insulation.  
*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

**7.4.4.2 Service Hot Water Piping Insulation.** Pipe insulation shall comply with Section 7.4.3.11. These requirements supersede the requirements in Section 7.4.3 of ANSI/ASHRAE/IES Standard 90.1.

**7.4.4.2 7.4.4.3 Insulation for Spa Pools.** Pools Heated to more than 90°F (32°C) shall have side and bottom surfaces insulated on the exterior with a minimum insulation value of R-12 (R-2.1).

**28\*** **7.4.6.5 Controls for Exterior Sign Lighting.** Make the following corrections to Section 7.4.6.5:  
(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

**7.4.6.5 Controls for Exterior Sign Lighting.** All exterior sign lighting, including internally illuminated signs and lighting on externally illuminated signs, shall comply with the requirements of Sections ~~7.4.6.8.1~~ 7.4.6.5.1 or ~~7.4.6.8.2~~ 7.4.6.5.2.

**Exceptions:**

- a. Sign lighting that is specifically required by a health or life safety statute, ordinance, or regulation.
- b. Signs in tunnels.

**30\*\*\*** **7.4.7.3 Energy Star Equipment.** In Section 7.4.7.3g, item number 8, add the following:  
(Note: Additions are shown in underline)

- g. Commercial Food Service.
  - 8. Commercial Ovens: ENERGY STAR Program Requirements for Commercial Ovens (see also water efficiency requirements in Section 6.4.2.2)

**40\*\*\*** **Table 10.3.1.4 Maximum Concentration of Air Pollutants Relevant to IAQ.** In the second footnote to Table 10.3.1.4 change “CA/DHS/EHLB/R-174” to “CDPH/EHLB/Standard Method V1.1”.

**46\*\*** **11. Normative References.** Make the following corrections to the references in Section 11:  
(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

Reference	Title	Section
Green-e c/o Center for Resource Solutions 1012 Torney Ave., Second Floor San Francisco, CA 94129, United States 1- 415-561-2100; www.green-e.org	Green-e Energy National Standard for Renewable Electricity Products	<del>7.4.1.2</del> <u>7.4.1.1</u> (2)
Version 1.6, Dec 5, 2008		

**71\*\*\*** **Normative Appendix C – Prescriptive Equipment Efficiency Tables.** Change the informative note preceding Table C-1 as follows:  
(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)

**Informative Note:** The first ~~14~~ 15 table are in I-P units, followed by ~~14~~ 15 tables in SI units.

(Reference Addendum h to Standard 189.1-2009 which deleted Table C-11 in its entirety. Informative note did not get updated to reflect the fact that there are now 14 tables.)

**92** **Table C-9 (Superseded Table 6.8.2A in ANSI/ASHRAE/IES Standard 90.1) Minimum Duct Insulation R-Value<sup>a</sup> Cooling and Heating Only Supply Ducts and Return Ducts (SI).** In Table C-9 change “R-10” with “R-1.76” in three places (Duct Location-Ventilated Attic Climate Zone 8 and Duct Location-Unvented Attic Above Insulated Ceiling Climate Zones 1 and 2) and change “R-1.9” to “R-0.33” in one place (Duct Location - Exterior Climate Zone 7, 8).

**104\*** **Informative Appendix G – Informative References.** Make the following corrections to the references in Informative Appendix G:  
*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

Reference	Title	Section
Canadian Standards Association (CSA) 5060 Spectrum Way, Suite 100 Mississauga, Ontario, L4W 5N6, Canada 1-800-463-6727 and 1-416-747-4000; www.csa.ca	CSA S478-95 (R2007) Guideline on Durability for Buildings	<del>9.4.1, 10.3.2.3</del> <u>9.4.2.1.3.1, 10.3.4</u>
GREENGUARD Environmental Institute 2211 Newmarket Parkway, #110 Marietta, GA 30067, United States 1-678-444-4055; www.greenguard.org		<del>8.4.2, 8.5.2, Appendix E</del> <u>8.4.2, 8.5.2</u>

**104\*\*\*** **Informative Appendix G – Informative References.** Make the following corrections to the references in Informative Appendix G:  
*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

Reference	Title	Section
<del>UL GREENGUARD Gold Environmental Institute</del> 2211 Newmarket Parkway, #110 Marietta, GA 30067, United States <del>1-678-444-4055; www.greenguard.org</del> <u>1-800-427-9681; www.ul.com/environment</u>		8.4.2, 8.5.2, Appendix E

**104\*\*** **Informative Appendix G – Informative References.** Make the following corrections to the references in Informative Appendix G:  
*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

Reference	Title	Section
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<b>Institute of Transportation Engineers</b> <b>1099 14th Street NW, Suite 300 West</b> <b>Washington, DC 20005-3438, United States</b> <b>1-202-289-0222; www.ite.org</b>		
4th Edition, 2004	Parking Generation	<del>40.3.6-10.3.2.4</del>
<b>National Renewable Energy Laboratory (NREL)</b> <b>1617 Cole Blvd.</b> <b>Golden, CO 80401-3393, United States</b> <b>1-303-275-3000; www.nrel.gov</b>		
NREL/TP-550-38617	Source Energy and Emissions Factors for Energy Use in Buildings	Table 7.5.3 <del>4</del>

**105\*\*** **Informative Appendix G – Informative References.** Make the following corrections to the references in Informative Appendix G:  
*(Note: Additions are shown in underline and deletions are shown in ~~strikethrough~~.)*

Reference	Title	Section
<b>Sheet Metal and Air Conditioning Contractors National Association (SMACNA)</b> <b>4201 Lafayette Center Drive</b> <b>Chantilly, VA 20151, United States</b> <b>1-703-803-2980</b>		
ANSI/SMACNA 008-2008	IAQ Guidelines for Occupied Buildings under Construction	<del>40.3.6-10.3.1.4(a)</del>
<b>United States Environmental Protection Agency (EPA)</b> <b>1200 Pennsylvania Ave NW</b> <b>Washington, DC 20460, United States</b> <b>1-888-782-7937 and 1- 202-775-6650; www.energystar.gov</b>		
	Portfolio Manager	<del>40.3.3.3.1-10.3.2.1.3.2</del>