

**ERRATA SHEET FOR THE 2008 SUPPLEMENT TO  
ANSI/ASHRAE/IESNA STANDARD 90.1-2007  
Energy Standard for Buildings Except Low-Rise Residential Buildings**

**March 16, 2009**

The corrections listed in this errata sheet apply to the first printing of the 2008 Supplement to ANSI/ASHRAE/IESNA Standard 90.1-2007, identified on the outside back cover of the supplement as “02/09”. The 2008 Supplement includes Addenda a, b, c, g, h, i, j, k, l, m, n, p, q, s, t, u, w, y, ad, and aw to 90.1-2007. A free copy is available on the ASHRAE website at <http://www.ashrae.org/technology/page/132>.

**NOTICE:** ASHRAE now has a list server for Standing Standards Project Committee 90.1 (SSPC 90.1). 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 and the User’s Manual 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 <http://www.ashrae.org/publications/detail/15620>.

**Page(s)   Erratum**

- 67-68   Appendix 18-Month Supplement.** Replace the Appendix in the 2008 Supplement with the attached. Immediately following the fifth column in the appendix a new column titled “IESNA Approval” was added. ASHRAE and ANSI approval dates have been corrected as well.

**(This appendix 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.)**

**APPENDIX  
18-MONTH SUPPLEMENT  
ADDENDA TO ANSI/ASHRAE STANDARD 90.1-2007**

This supplement includes Addenda a, b, c, g, h, i, j, k, l, m, n, p, q, s, t, u, w, y, ad, and aw to ANSI/ASHRAE Standard 90.1-2007. The following table lists each addendum and describes the way in which the standard is affected by the change. It also lists the ASHRAE and ANSI approval dates for each addendum.

Addendum	Section(s) Affected	Description of Changes*	ASHRAE Standards Committee Approval	ASHRAE BOD Approval	IESNA Approval	ANSI Approval
a	6.8.1G	This addendum seeks to clarify that the current cooling tower requirements in the Standard apply to open-circuit cooling towers only.	June 23, 2007	June 27, 2007	June 12, 2007	July 25, 2007
b	6.5.2.3	This addendum updates the references for outdoor ventilation rates.	June 23, 2007	June 27, 2007	June 12, 2007	July 25, 2007
c	6.5.2.3	This addendum adds vivariums to the list of spaces that require specific humidity levels to satisfy process needs.	June 23, 2007	June 27, 2008	June 12, 2007	July 25, 2007
g	Section 5, Normative Appendix A2.3	This addendum updates the building envelope criteria for metal buildings.	June 21, 2008	June 25, 2008	June 30, 2008	June 26, 2008
h	6.5.2.1	This addendum adds a new exception that is geared toward zones with direct digital controls (DDC).	June 21, 2008	June 25, 2008	June 30, 2008	June 26, 2008
i	9.4.5	This addendum applies a four-zone lighting power density approach to exterior lighting requirements.	June 21, 2008	June 25, 2008	June 30, 2008	June 26, 2008
j	Section 12, Informative Appendix E	This addendum updates references in the Standard.	January 19, 2008	January 23, 2008	January 28, 2008	January 26, 2008
k	Table 6.8.1E, Table 7.8	This addendum specifies specific sections of reference standards in Tables 6.8.1E and 7.8.	January 19, 2008	January 23, 2008	January 28, 2008	July 24, 2008
l	Table 6.8.1G, Section 12	This Addendum adds minimum efficiency and certification requirements for both axial and centrifugal fan closed-circuit cooling towers (also known as <i>fluid coolers</i> ) to Table 6.8.1G. In addition, a reference to ATC-105S, the Cooling Technology Institute test standard for closed-circuit cooling towers, has been added to Section 12, Normative References.	January 19, 2008	January 23, 2008	January 28, 2008	July 24, 2008
m	Section 6.4.1.2, Table 6.8.1C	This addendum establishes effective January 1, 2010, an additional path of compliance for water-cooled chillers and also combines all water-cooled positive displacement chillers into one category and adds a new size category for centrifugal chillers at or above 600 tons	October 12, 2008	October 24, 2008	October 10, 2008	October 27, 2008
n	6.4.3.10	This addendum extends variable air volume fan control requirements to large single-zone units.	June 21, 2008	June 25, 2008	June 30, 2008	June 26, 2008

Addendum	Section(s) Affected	Description of Changes*	ASHRAE Standards Committee Approval	ASHRAE BOD Approval	IESNA Approval	ANSI Approval
p	6.5.3.1.1	This addendum addresses fan power limitations to all fan systems with exception to those serving fume hoods.	June 21, 2008	June 25, 2008	June 30, 2008	June 26, 2008
q	5.4.3.4	This addendum modifies the vestibule requirements for climate zone 4.	January 19, 2008	January 23, 2008	January 28, 2008	July 24, 2008
s	Table 6.8.1A, Table 6.8.1B	This addendum updates the COP at 17oF efficiency levels for commercial heat pumps and introduces a new part load energy efficiency descriptor for all commercial unitary products above 65,000 Btu/h of cooling capacity.	October 12, 2008	October 24, 2008	October 10, 2008	October 27, 2008
t	6.4.1.5.2, Table 6.8.1D	This addendum removes the terms “replacement” and “new construction” from the product classes listed in Table 6.8.1D and replaces them with the terms “non-standard size” and “standard size,” respectively, to clarify that one product class is intended for applications with non-standard size exterior wall openings while the other is intended for applications with standard size exterior wall openings. The addendum also amends Section 6.4.1.5.2 and footnote b to Table 6.8.1D to clarify that non-standard size packaged terminal equipment have sleeves with an external wall opening less than 16 in. high or less than 42 in. wide to reflect existing applications where the wall opening is not necessarily less than 16 in. high and less than 42 in. wide.	October 12, 2008	October 24, 2008	October 10, 2008	October 27, 2008
u	6.5.5.3	This addendum adds requirements for axial fan open-circuit cooling towers.	October 12, 2008	October 24, 2008	October 10, 2008	October 27, 2008
w	Table G3.1.1A, Section G3.1.2.10	This addendum modifies requirements on exhaust air energy recovery for multifamily buildings in Appendix G.	October 12, 2008	October 24, 2008	October 10, 2008	October 27, 2008
y	Table 7.8, Section 12	This addendum establishes ARI 1160 as the test procedure for heat pump pool heaters and that the minimum COP be met at the low outdoor temperature of 50°F.	June 21, 2008	June 25, 2008	June 30, 2008	June 26, 2008
ad	Table 6.8.1K, Section 6.4.1.4, Section 12	This addendum adds requirements for liquid to liquid heat exchangers and adds a reference to AARI 400-2008.	June 21, 2008	June 25, 2008	June 30, 2008	July 24, 2008
aw	9.4.1.4	This change recognizes the practical design application of excluding bathroom lighting from “master” switch control in hotel/motel guest rooms and adds a requirement to eliminate wasted light in guest room bathrooms.	January 19, 2008	January 23, 2008	January 28, 2008	June 26, 2008

\* These descriptions may not be complete and are provided for information only.