

**ERRATA SHEET FOR FIRST PRINTING AND REPRINT 2/02**  
**ANSI/ASHRAE/IESNA STANDARD 90.1-2001 (SI edition)**  
**Energy Standard for Buildings Except Low-Rise Residential Buildings**

**February 15, 2002**

The corrections listed in this errata sheet apply to the first printing and reprint of ANSI/ASHRAE/IESNA Standard 90.1-2001, SI edition. The outside back cover marking identifying the reprint in “86247 PC 2/02” and is blank for the first printing. The shaded items have been added since the previous published errata sheet dated December 15, 2001.

**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 **Standards List Servers** on the Standards and Codes section of the ASHRAE website at <http://xp20.ashrae.org/STANDARDS/listservers.htm>

**Page   Erratum**

As Noted   **All Sections.** Wherever the word “transformer” appears in the standard, it shall be italicized, “*transformer*”.

24   **Section 5.5.3.2 Fenestration and Doors.** Under Exceptions to 5.5.3.2 (b), change the reference “NAGDM 105” to “ANSI/DASMA 105”.

28   **Table 6.2.1B, Electrically Operated Unitary and Applied Heat Pumps - Minimum Efficiency Requirements.** In the second column, corresponding to **Equipment Type** : Water-Source (Cooling Mode), combine “≥ 5 kW and <19 kW” with “≥19 kW and <40 kW” to indicate a single size category “≥5 kW and <40 kW”. In addition, combine the corresponding duplicate information in columns 3 through 6 into a single row.

29   **Table 6.2.1C, Water Chilling Packages-Minimum Efficiency Requirements.** In the second column, corresponding to **Equipment Type**: Air Cooled, with Condenser, Electrically Operated, combine “<528 kW” with “≥528 kW” to indicate a single size category “All Capacities”.

30   **Table 6.2.1D, Electrically Operated Packaged Terminal Air Conditioners, Packaged Terminal Heat Pumps, Room Air Conditioners, and Room Air Conditioner Heat Pumps -Minimum Efficiency Requirements.**  
Make the following editorial corrections:

- In the second column, corresponding to **Equipment Type**: “Room Air Conditioners, with Louvered Sides”, combine “<1.8 kW” with “≥1.8 kW

and <2.3 kW” to indicate a single size category “<2.3kW”. In addition, combine the corresponding duplicate information in column 4 into a single row.

- In the second column corresponding to **Equipment Type**: “Room Air Conditioners, without Louvered Sides”, combine “≥2.3 kW and <5.9 kW” with “≥5.9 kW” to indicate a single size category “≥2.3 kW”. In addition, combine the corresponding duplicate information in column 4 into a single row.

41 **Table 6.2.4.2A, Minimum Duct Insulation R-Value,<sup>a</sup> Cooling and Heating Only Supply Ducts and Return Ducts.** In the second row, sixth column, change the column heading from “Unvented Attic with Backloaded Ceiling” to “Unvented Attic Above Insulated Ceiling”.

42 **Table 6.2.4.2B, Minimum Duct Insulation R-Value,<sup>a</sup> Combined Heating and Cooling Ducts.** In the second row, sixth column, change the column heading from “Unvented Attic w/ Backloaded Ceiling” to “Unvented Attic Above Insulated Ceiling”.

46 **Exceptions to 6.3.2.1 Zone Controls.** In Exceptions to 6.3.2.1 (c) italicize the terms “site-recovered” and “site solar energy” and add a hyphen between the word “site” and “solar” as follows: “*site-recovered*” and “*site-solar energy*”.

47 **Section 6.3.3.1 Fan Power Limitation.** Following the Allowable Fan System Power equation change the term “Temperature Ratio =  $(T_{t-stat} - T_s)/20$  (11.1)” to “Temperature Ratio =  $(T_{t-stat} - T_s)/11.1$ ”.

50 **Table 7.2.2, Performance Requirements for Water Heating Equipment.** Make the following editorial corrections:

- In the second column, corresponding to **Equipment Type**: “Gas Storage Water Heaters”, combine “>22.98 kW and ≤45.43 kW” with “>45.43 kW” to indicate a single size category “>22.98 kW”. In addition, combine the corresponding duplicate information in columns 3 and 4 into a single row.
- In the second column, corresponding to **Equipment Type**: “Oil Storage Water Heaters”, combine “>30.78 kW and ≤45.43 kW” with “>45.43 kW” to indicate a single size category “>30.78 kW”. In addition, combine the corresponding duplicate information in columns 3 and 4 into a single row.

67 **Section 12 Normative References.** Change the reference “NAGDM 105-1992” to “ANSI/DASMA 105-1992 (R 1998)”.

129 **Section C6.10.1.** Change Equation C-20 from

$$\text{“U-factor} = 1/((\text{C-factor}) + 0.85 + R_{\text{soil}})\text{”}$$

to

$$\text{“U-factor} = 1/(1/(\text{C-factor}) + 0.15 + R_{\text{soil}})\text{”}.$$