ERRATA SHEET FOR FIRST PRINTING AND REPRINT 2/02 ANSI/ASHRAE/IESNA STANDARD 90.1-2001 (I-P 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, I-P edition. The outside back cover marking identifying the reprint in "86245 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 All Sections. Wherever the word "transformer" appears in the standard, it shall Noted be italicized, "transformer".
 - **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".
- 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 "≥ 17,000 Btu/h and <65,000 Btu/h" with "≥65,000 Btu/h and <135,000 Btu/h" to indicate a single size category "≥17,000 Btu/h and <135,000 Btu/h". In addition, combine the corresponding duplicate information in columns 3 through 6 into a single row.
- 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 "<150 tons" with "≥150 tons" to indicate a single size category "All Capacities".
- 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 "<6000 Btu/h" with "≥6000 Btu/h" to indicate a single size category "<8000 Btu/h". 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 '≥8000 Btu/h and <20,000 Btu/h" with '≥20,000 Btu/h" to indicate a single size category '≥8000 Btu/h". In addition, combine the corresponding duplicate information in column 4 into a single row.
- Table 6.2.4.2A, Minimum Duct Insulation R-Value, 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".
- Table 6.2.4.2B, Minimum Duct Insulation R-Value, 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".
- **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".
- 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 = $(T_{t-stat} T_S)/20$ ".
- 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 ">75,000 Btu/h and ≤155,000 Btu/h" with ">155,000 Btu/h" to indicate a single size category ">75,000 Btu/h". 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 ">105,000 Btu/h and ≤155,000 Btu/h" with ">155,000 Btu/h" to indicate a single size category ">105,000 Btu/h". In addition, combine the corresponding duplicate information in columns 3 and 4 into a single row.
- **Section 12 Normative References.** Change the reference "NAGDM 105-1992" to "ANSI/DASMA 105-1992 (R 1998)".

- 78 **TABLE A-9** (Section A3.2), Assembly U-Factors for Metal Buildings. In the seventh column under **R-16.8**, for **Single Layer of Mineral Fiber**, R-10, change the Overall U-Factor from "0.051" to "0.041".
- 130 **Section C6.10.1.** Change Equation C-20 from

"U-factor =
$$1/((C-factor) + 0.85 + R_{soil})$$
"

to

"U-factor =
$$1/(1/(C-factor) + 0.85 + R_{soil})$$
".