



**BSR/ASHRAE/IES Addendum be
to ANSI/ASHRAE/IES Standard 90.1-2016**

Public Review Draft

Proposed Addendum be to Standard 90.1-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings

**Third Public Review Draft (May 2019)
(Draft Shows Proposed Independent Substantive
Changes to Previous Public Review Draft)**

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(This foreword 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.)

FOREWORD

This is the original foreword from the full second public review and is included for reference and background.

This addendum updates the efficiency requirements for Computer Room air conditioners as listed in table 6.8.1-11 and adds a new table 6.8.1-19. The following changes are being made.

- The current products listed in table 6.8.1-11 are for floor mounted computer room units and this is being clarified as part of the addendum change. The efficiencies are being updated to better align with the industry levels and are in most product classes increasing in the order of 3-5%. A quick check of the cost effectiveness shows that payback periods are in the order of 2-3 years and well below what the scalar limit of 10 for a 15 year life so the change is cost effective.
- The second change that is being made is to add a new table 6.8.1-19 which covers small ceiling mounted computer room units. This is a new table and reflects current industry products and is being added to cover these products in the standard. As it is current products no cost justification has been done.

Both these changes were developed by the AHRI Datacom Cooling Section and was agreed to and approved by the industry.

Third Public Review ISC

In reviewing the final draft for publication it was noted that the rating conditions for the return air were listed as dry bulb and wet bulb which is the typical method used for this, but the AHRI 1360 rating standard and the current ASHRAE 90.1 table 6.8.1-11 uses dry bulb and dew point so this ISC is being released to cover the change from wet bulb to dew point in table 6.8.1-11 and 6.8.1-19 in both the IP and SI versions.

[Note to Reviewers: This public review draft makes proposed independent substantive changes to the previous public review draft. These changes are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes. Only these changes to the previous draft are open for review and comment at this time. Additional material is provided for context only and is not open for comment except as it relates to the proposed substantive changes.]

Addendum BE to 90.1-2016

For the third public review ISC make the following changes to the revised IP table 6.8.1-11

Table 6.8.1-11 Floor Mounted Air Conditioners and Condensing Units Serving Computer Rooms—Minimum Efficiency Requirements

Equipment Type	Standard Model	Net Sensible Cooling Capacity	Minimum Net Sensible COP	Rating Conditions Return air (dry bulb/ wet bulb dew point)	Test Procedure
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For the third public review ISC make the following changes to the revised SI table 6.8.1-11

Table 6.8.1-11 Floor Mounted Air Conditioners and Condensing Units Serving Computer Rooms—Minimum Efficiency Requirements

Equipment Type	Standard Model	Net Sensible Cooling Capacity	Minimum Net Sensible COP	Rating Conditions Return air (dry bulb/ wet bulb dewpoint)	Test Procedure
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For the third public review ISC make the following changes to the revised IP table 6.8.1-19

Table 6.8.1-19 Ceiling Mounted Computer Room Air Conditioners —Minimum Efficiency Requirements

Equipment Type	Standard Model	Net Sensible Cooling Capacity	Minimum Net Sensible COP	Rating Conditions Return air (dry bulb/ wet bulb dew point)	Test Procedure
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For the third public review make the following changes the revised SI table 6.8.1-19

Table 6.8.1-19 Ceiling Mounted Computer Room Air Conditioners —Minimum Efficiency Requirements

Equipment Type	Standard Model	Net Sensible Cooling Capacity	Minimum Net Sensible COP	Rating Conditions Return air (dry bulb/ wet bulb dew point)	Test Procedure
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