ADDENDA

ANSI/ASHRAE/IES Addendum bk to
ANSI/ASHRAE/IES Standard 90.1-2013

Energy Standard for Buildings Except Low-Rise Residential Buildings

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FOREWORD

Addendum bk addresses control of fans in fan-powered parallel VAV boxes. The fan is only required during heating; however, these fans may be programmed to run continuously during occupied hours. The addendum also requires the fan operation to be used as the first stage of heating and allows fan operation in response to DCV ventilation requests. Use of primary air for setback and warmup heating during unoccupied hours is not allowed unless the terminal logic is reversed and primary air provides central heating rather than cooling.

Cost effectiveness: This represents a setup of controls and does not require new equipment, so there is no anticipated cost increase and cost effectiveness analysis is not required.

This addendum makes proposed changes to the current standard. These changes are indicated in the text by <u>underlining</u> (for additions) and ~~strikethrough~~ (for deletions) except where the reviewer instructions specifically describe some other means of showing the changes.

Addendum bk to 90.1-2013

Modify the standard as follows (I-P and SI):

<u>6.5.3.4 Parallel-Flow Fan-Powered VAV Air Terminal Control.</u> <u>Parallel-flow fan-powered VAV air terminals shall have automatic controls configured to</u>

1. <u>turn off the terminal fan except when space heating is required or if required for ventilation,</u>
2. <u>turn on the terminal fan as the first stage of heating before the heating coil is activated, and</u>
3. <u>during heating for warmup or setback temperature control, either</u>
   a. <u>operate the terminal fan and heating coil without primary air or</u>
   b. <u>reverse the terminal damper logic and provide heating from the central air handler through primary air.</u>

[Renumber current Sections 6.5.3.4 and 6.5.3.5 as 6.5.3.5 and 6.5.3.6, respectively.]

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ASHRAE's short-range goal is to ensure that the systems and components within its scope do not impact the indoor and outdoor environment to a greater extent than specified by the Standards and Guidelines as established by itself and other responsible bodies.

As an ongoing goal, ASHRAE will, through its Standards Committee and extensive Technical Committee structure, continue to generate up-to-date Standards and Guidelines where appropriate and adopt, recommend, and promote those new and revised Standards developed by other responsible organizations.

Through its *Handbook*, appropriate chapters will contain up-to-date Standards and design considerations as the material is systematically revised.

ASHRAE will take the lead with respect to dissemination of environmental information of its primary interest and will seek out and disseminate information from other responsible organizations that is pertinent, as guides to updating Standards and Guidelines.

The effects of the design and selection of equipment and systems will be considered within the scope of the system's intended use and expected misuse. The disposal of hazardous materials, if any, will also be considered.

ASHRAE's primary concern for environmental impact will be at the site where equipment within ASHRAE's scope operates. However, energy source selection and the possible environmental impact due to the energy source and energy transportation will be considered where possible. Recommendations concerning energy source selection should be made by its members.

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8/16