ANSI/ASHRAE Addendum j to
ANSI/ASHRAE Standard 55-2004

ASHRAE STANDARD

Thermal Environmental Conditions for Human Occupancy

Approved by the ASHRAE Standards Committee on June 26, 2010; by the ASHRAE Board of Directors June 30, 2010; and by the American National Standards Institute on July 23, 2010.

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ASHRAE obtains consensus through participation of its national and international members, associated societies, and public review.

ASHRAE Standards are prepared by a Project Committee appointed specifically for the purpose of writing the Standard. The Project Committee Chair and Vice-Chair must be members of ASHRAE; while other committee members may or may not be ASHRAE members, all must be technically qualified in the subject area of the Standard. Every effort is made to balance the concerned interests on all Project Committees.

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FOREWORD

This change to Section 5.4 clarifies and adds to the description of the environmental variables, which is presented in the Standard for the purpose of understanding their use in Section 5. It is not a measurement specification or requirement, which is addressed in Section 7 of the Standard. Since the Standard, based on changes published last year, now allows the designer to choose the appropriate average air speed for use in design calculations, this language clarifies that the designer is to make these choices within the context of specific temporal, spatial, and clothing restraints that are not otherwise stipulated in the Normative sections of the Standard. This addendum makes it clear that the designer, when determining average air speed in a space, must include values for the speeds expected to be experienced on unclothed body parts.

Note: In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~strikethrough~~ (for deletions) unless the instructions specifi-

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[Revise the definition of air speed in Section 5.4 as follows. (The rest of Section 5.4 remains unchanged)]

5.4 Description of Thermal Environmental Variables. *Air speed* is the average speed of the air to which the body is exposed. The average is with respect to location and time. Time averaging ~~and special averaging are~~is the same as for air temperature. However, the time-averaging period extends only to three minutes. Variations that occur over a period greater than three minutes shall be treated as multiple different air speeds. As to spatial averaging, the SET thermophysiological model described in Section 5.2.3.2 is based on the assumption that the body is exposed to a uniform air speed. However, spaces with passive or active systems that provide strongly nonuniform air velocity fields cause skin heat losses that cannot be simply related to those of uniform velocity fields. Therefore, the designer shall decide the proper averaging for air speed for use in the Graphical Method (5.2.3.1) and Appendix F "Procedure for Evaluating Cooling Effect of Elevated Air speed Using SET." The proper averaging shall include air speeds incident on unclothed body parts (e.g., head) that have greater cooling effect and potential for local discomfort than unclothed parts.

POLICY STATEMENT DEFINING ASHRAE'S CONCERN FOR THE ENVIRONMENTAL IMPACT OF ITS ACTIVITIES

ASHRAE is concerned with the impact of its members' activities on both the indoor and outdoor environment. ASHRAE's members will strive to minimize any possible deleterious effect on the indoor and outdoor environment of the systems and components in their responsibility while maximizing the beneficial effects these systems provide, consistent with accepted standards and the practical state of the art.

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.