ADDENDA

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

Energy Standard for Buildings Except Low-Rise Residential Buildings

Approved by the ASHRAE Standards Committee on January 23, 2016; by the ASHRAE Board of Directors on January 27, 2016; by the IES Board of Directors on December 31, 2015; and by the American National Standards Institute on January 28, 2016.

This addendum was approved by a Standing Standard Project Committee (SSPC) for which the Standards Committee has established a documented program for regular publication of addenda or revisions, including procedures for timely, documented, consensus action on requests for change to any part of the standard. The change submittal form, instructions, and deadlines may be obtained in electronic form from the ASHRAE website (www.ashrae.org) or in paper form from the Senior Manager of Standards.

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FOREWORD

In systems serving multiple zones, some of exhaust air may be unsuitable for heat recovery, while other exhaust air is suitable for heat recovery. Rather than provide blanket exceptions 3 and 4 for systems with unsuitable exhaust air, the exceptions are reorganized so that the exception only applies to systems with suitable exhaust airflow less than 75% of the design outdoor air. The "75% of outdoor air" requirement is the same as the current edition of the standard. Instead of the specific descriptions of unsuitable air:

- *"Class 4 exhaust air as defined in ASHRAE Standard 62.1" covers the types of air referred to in exceptions 3 and 4, as well as other types that we omitted.*
- *An exclusion is added from ASHRAE Standard 170 for air deemed unsuitable for use where leakage potential exists. (Standard 170 is added to the normative references.)*

In addition, the intent of the original exception for the largest source of exhaust air at a single location at the building exterior has been clarified by a distance.

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 specifically mention some other means of indicating the changes.

Addendum aw to 90.1-2013

Modify the standard as follows (IP and SI Units).

6.5.6 Energy Recovery

6.5.6.1 Exhaust Air Energy Recovery. Each fan system shall have an energy recovery system when the system's supply airflow rate exceeds the value listed in Tables 6.5.6.1-1 and 6.5.6.1-2, based on the climate zone and percentage of outdoor airflow rate at design conditions. Table 6.5.6.1-1 shall be used for all ventilation systems that operate less than 8000 hours per year, and Table 6.5.6.1-2 shall be used for all ventilation systems that operate 8000 or more hours per year...

. . .

Exceptions:

1. Laboratory systems meeting Section 6.5.7.2
2. Systems serving spaces that are not cooled and that are heated to less than 60°F
3. ~~Systems exhausting toxic, flammable, paint, or corrosive fumes or dust~~
~~4. Commercial kitchen hoods used for collecting and removing grease vapors and smoke~~
~~5.~~ Where more than 60% of the outdoor air heating energy is provided from site-recovered or site solar energy
~~6~~4. Heating energy recovery in Climate Zones 1 and 2~~.~~
~~7~~5. Cooling energy recovery in Climate Zones 3c, 4c, 5b, 5c, 6b, 7, and 8
~~8~~6. Where the sum of the airflow rates exhausted and relieved within 20 ft (6 m) of each other ~~the largest source of air exhausted at a single location at the building exterior~~ is less than 75% of the design outdoor airflow rate, excluding exhaust air that is
    a. used for another energy recovery system

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b. not allowed by ASHRAE Standard 170 for use in energy recovery systems with leakage potential, or
c. of Class 4 as defined in ASHRAE Standard 62.1

~~9~~7. Systems requiring dehumidification that employ energy recovery in series with the cooling coil
~~10~~8. Systems expected to operate less than 20 hours per week at the outdoor air percentage covered by Table 6.5.6.1-1.

Add the following reference to Section 12

Reference	**Title**
ASHRAE **1791 Tullie Circle, NE, Atlanta, GA 30329**	
ANSI/ASHRAE/ASHE Standard 170-2013	Ventilation of Health Care Facilities

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.

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