

# STANDARD

**ANSI/ASHRAE/IES Addendum ag to  
ANSI/ASHRAE/IES Standard 90.1-2022**

# Energy Standard for Sites and Buildings Except Low-Rise Residential Buildings

Approved by ASHRAE and the American National Standards Institute on October 31, 2024, and by the Illuminating Engineering Society on October 15, 2024.

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. Instructions for how to submit a change can be found on the ASHRAE® website (<https://www.ashrae.org/continuous-maintenance>).

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## FOREWORD

*Addendum ag, initiated by a continuous maintenance proposal, improves the definition of “series energy recovery ratio (SERR)” by removing the specific dry-bulb condition at which it is rated to allow the term to be used for different conditions. The rated entering air conditions have been moved to Exception 7 to Section 6.5.6.1.2, which covers exhaust air energy requirements for other than nontransient dwelling units.*

*In addition, the term, as shown in Section 3.2, has been changed from “energy recovery, series” to “series energy recovery” to make it easier to find in the definitions list.*

*This addendum does not change requirements to meet the exception.*

*The construction cost has not changed because the stringency has not changed.*

**Note:** In this addendum, changes to the current standard are indicated in the text by underlining (for additions) and ~~striking through~~ (for deletions) unless the instructions specifically mention some other means of indicating the changes.

### Addendum ag to Standard 90.1-2022

#### Modify Section 3.2 as shown (I-P and SI).

[ . . . ]

**series energy recovery ratio, ~~series~~ (SERR):** the difference between the dry-bulb air temperatures leaving the *series energy recovery* unit and leaving the dehumidifying coil divided by the difference between ~~75°F~~ and the dry-bulb temperatures of the air entering the *series energy recovery* unit and ~~of~~ the air leaving the dehumidifying cooling coil.

**series energy recovery, ~~series~~:** a three-step process in which the first step is to remove *energy* from a single airstream without the use of *mechanical cooling*. In the second step, the airstream is mechanically cooled for the purpose of dehumidification. In the third step, the *energy* removed in step one is reintroduced to the airstream.

[ . . . ]

#### Modify Exception 7 to 6.5.6.1.2 as shown (I-P and SI).

##### Exceptions to 6.5.6.1.2:

[ . . . ]

7. Systems in Climate Zones 0 through 4 requiring dehumidification that employ *series energy recovery* and have a minimum SERR of 0.40 at 75.0°F (23.9°C) dry-bulb, 63.0°F (17.2°C) wet-bulb entering air condition, and at the design airflow.

...

## **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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As an industry leader in research, standards writing, publishing, certification, and continuing education, ASHRAE and its members are dedicated to promoting a healthy and sustainable built environment for all, through strategic partnerships with organizations in the HVAC&R community and across related industries.

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