



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

Public Review Draft

Proposed Addendum ag to Standard 90.1-2022, Energy Standard for Sites and Buildings Except Low- Rise Residential Buildings

**First Public Review (June 2024)
(Draft Shows Proposed Changes to Current Standard)**

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FOREWORD

This draft addendum, 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 non-transient 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.

Cost justification:

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

[Note to Reviewers: This addendum makes proposed changes to the current standard. 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 current standard 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 changes.]

Addendum ag to 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 6.5.5.1.2 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.

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