

Public Review Draft

Proposed Addendum e to Standard 189.1-2020

Standard for the Design of High-Performance Green Buildings Except Low-Rise Residential Buildings

First Public Review Draft (March 2021)
(Draft Shows Proposed Changes to Current Standard)

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Foreword

This addendum clarifies, by using defined terms, the permitted methods of supply air reheat in Section 8.3.1.6.1. To provide design flexibility, all types of on-site renewable energy systems can be used for supply air reheat, even though some may be considered to have other more beneficial uses. This addendum does not intend to make substantive changes to the section.

The requirements addressed by this addendum are expected to be enforced through the normal plan review process. The requirements include specifics on application to certain HVAC system types and are applicable to any building type with those systems.

The requirements of 8.3.1.6.1 are modified versions of requirements in Standard 90.1. The following definition from 90.1 is used in this addendum; it is provided below for information only, i.e. it is not open for public review.

site-recovered energy: waste energy recovered at the *building* site that is used to offset consumption of purchased *fuel* or electrical *energy* supplies.

[Note to Reviewers: This addendum makes proposed changes to the language published in 189.1-2020. 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 e to 189.1-2020

Revise Section 3.2 as follows:

site-recovered energy: see ANSI/ASHRAE/IES Standard 90.1.

Revise Section 8.3.1.6.1 as follows:

8.3.1.6.1 Cooling Coils. HVAC systems with dehumidification capability in Climate Zones 0A, 1A, 2A, 3A, 4A, and 4C shall be designed in accordance with one of the following:

a. Where recirculating systems do not include means for *HVAC zone* humidity sensing, such systems shall include controls capable of maintaining the average cooling-coil leaving air temperature at 53°F (12°C) or lower and shall include devices and controls capable of maintaining each *HVAC zone* sensible temperature set point using one of the following approaches:

1. Variable *HVAC zone* supply airflow rate
2. Variable return-air bypass flow around each cooling coil serving one or more *HVAC zones*
3. Variable *HVAC zone* supply air reheat using ~~site-recovered energy~~ site-recovered energy or ~~site-solar energy~~ on-site renewable energy systems.

Revise Appendix C as follows:

C1.1 Renewable, Recovered, and Purchased Energy. *On-site renewable energy systems* and ~~site-recovered energy~~ site-recovered energy: The modeling requirements for *on-site renewable energy systems* in the *proposed building performance* in ANSI/ASHRAE/IES Standard 90.1, Section G2.4.1, shall not apply and are superseded by Table C1.1, Section 15, “Renewable Energy Systems.”