

**ANSI/ASHRAE/ICC/USGBC/IES Addendum x to
ANSI/ASHRAE/ICC/USGBC/IES Standard 189.1-2017**

Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings

The Complete Technical Content of the International Green Construction Code[®]

Approved by the ASHRAE Standards Committee on June 26, 2019; by the ASHRAE Board of Directors on August 1, 2019; by the International Code Council on July 15, 2019; by the USGBC Board of Directors on August 6, 2019; by the IES Board of Directors on July 19, 2019; and by the American National Standards Institute on August 26, 2019.

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

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- a. interpretation of the contents of this Standard,
- b. participation in the next review of the Standard,
- c. offering constructive criticism for improving the Standard, or
- d. permission to reprint portions of the Standard.

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FOREWORD

Addendum x adds new energy efficiency requirements for traction elevators. The requirements apply to elevators in any size building that have a rise height of 75 ft (23 m) or greater. Shorter elevators are excluded from the new requirements because the expected energy savings are less substantial.

The first of the new requirements sets a minimum standard for elevator drive motor efficiency. The second requirement is for regenerative drives to be installed on the elevator. A regenerative drive is designed to capture mechanical energy generated while the elevator is braking and convert it into electrical

energy for use in the building. Both technologies are considered current best practices and are widely available.

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

Addendum x to Standard 189.1-2017

Add a new Section 7.4.7.6 as shown.

7.4.7.6 Elevator Power Conversion System. In new buildings, traction elevators with a rise of 75 ft (23 m) or more shall be provided with a power conversion system that includes all of the following:

- a. A drive motor with a minimum Class IE2 efficiency rating, as defined by IEC EN 60034-30
- b. A regenerative drive that recovers potential energy released during motion, converts it to electrical energy, and supplies it to the building electrical system

Add a new normative reference to Section 11 as shown.

Reference	Title	Section
<u>International Electrotechnical Commission</u> <u>IEC Regional Centre for North America (IEC-ReCNA)</u> <u>446 Main Street, 16th Floor</u> <u>Worcester, MA 01608 (USA)</u> <u>1-508-755-5663; www.iec.ch</u>		
IEC EN 60034-30	Rotating Electrical Machines—Part 30-1: Efficiency Classes of Line Operated AC Motors (IE code)	7.4.7.6

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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.

