

# STANDARD

**ANSI/ASHRAE/ASHE Standard 189.3-2017**

# Design, Construction, and Operation of Sustainable High-Performance Health Care Facilities

Approved by the ASHRAE Standards Committee on March 1, 2017; by the ASHRAE Board of Directors on March 10, 2017; by the American Society for Healthcare Engineering on February 22, 2017; and by the American National Standards Institute on April 1, 2017.

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The committee also recognizes and remembers the contributions of Judene Bartley. Her knowledge of her craft and her willingness to listen to and share and work with the ASHRAE committees with a focus on healthcare made us a better organization. We thank her and miss her.

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#### NOTE

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## FOREWORD

ASHRAE/ASHE Standard 170 addresses the specific ventilation requirements of a health care facility separately from the general ventilation requirements of ASHRAE Standard 62.1.

Similarly, ASHRAE/ASHE Standard 189.3 was developed parallel to yet separately from ASHRAE/USGBC/IES Standard 189.1 to address the sustainability of health care facilities. Standard 189.1 provided a solid foundation and a clear path for the development of Standard 189.3 and, as such, is employed here as an essential, primary reference.

The development of Standard 189.3 presented unique challenges to the accurate reference of its primary sources. Standard 90.1 forms the basis for Standard 189.1, which in turn serves as the basis for Standard 189.3. Because these standards are revised on separate continuous maintenance schedules, the committee debated over which criteria were necessary to include in this document. We acknowledge that the source publications that form the basis for compliance have, in some cases, moved forward without us. In order to join the process of continuous improvement, we have to establish a point at which to begin. The objective of the committee is to align development of this standard with the development of Standards 90.1 and 189.1, and thus to benefit from those efforts, while providing the alternative perspective of this subset of the building sector.

Health care facilities have a substantial interest in sustainable development. These facilities are often the largest and most energy intensive buildings in a community, and their leadership recognizes that opportunities to conserve energy and reduce operating costs are matters of sound environmental and fiscal stewardship. In a competitive and regulated market, however, there are limitations on the ability of health care facilities to provide the necessary capital for the increasingly complex new facilities needed to meet sustainability objectives, particularly as these facilities experience eroding financial compensation for their life-sustaining services. Likewise, sustainability requirements often diverge from facility functions that may require energy consumption for the sake of patient and worker safety. The intent of this standard is to bridge the goal of sustainability offered in Standard 189.1 with the practical realities expressed by our partners in the health care community.

## 1. PURPOSE

The purpose of this standard is to prescribe the procedures, methods, and documentation requirements for the design, construction, and operation of high-performance, sustainable health care facilities.

## 2. SCOPE

**2.1** This standard applies to patient care areas and related support areas within health care facilities, including hospitals, nursing facilities, outpatient facilities, and their site.

**2.2** This standard applies to new buildings, additions to existing buildings, and those alterations to existing buildings that are identified within the standard.

**2.3** This standard provides procedures for the integration of sustainable principles into the health care facility design, construction, and operation process, including

- a. integrated design,
- b. conservation of water,
- c. conservation of energy,
- d. indoor environmental quality (IEQ),
- e. construction practices,
- f. commissioning, and
- g. operations and maintenance.

## 3. DEFINITIONS, ABBREVIATIONS, AND ACRONYMS

**3.1 General.** Certain terms, abbreviations, and acronyms are defined in this section for the purposes of this standard. These definitions are applicable to all sections of the standard.

Terms that are not defined herein but that are defined in standards that are referenced herein shall have the meanings as defined in those standards.

Other terms that are not defined shall have their ordinarily accepted meanings within the context in which they are used. Ordinarily accepted meanings shall be based on American Standard English language usage as documented in an unabridged dictionary accepted by the authority having jurisdiction (AHJ).

### 3.2 Definitions

**hand-washing station:** an area that provides a sink with hot- and cold-water supply and a faucet that facilitates easy on/off/mixing capabilities. The station also provides cleansing agents and means for drying hands.

**patient:** a person receiving medical, surgical, or psychiatric care in an inpatient or outpatient facility.

**public areas:** designated spaces freely accessible to the public. These include parking areas, secured entrances and areas, entrance lobbies, reception and waiting areas, public toilets, snack bars, cafeterias, vending areas, gift shops and other retail locations, health education libraries and meeting rooms, chapels, and gardens.

**resident:** a person living and receiving chronic or subacute care in an assisted living facility, skilled nursing facility, nursing home, hospice, or rehabilitation facility.

**residential health care facility:** a facility, building, or portion of a building that provides housing and services for a resident or group of residents.

**room:** a space enclosed by hard walls and having a door.