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U.S. Building Codes and Standards: Update on Changes

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Tampa Convention Center • Tampa, Florida

ASHRAE Overview

- Founded in 1894
- 56,500+ volunteer members in more than 130 countries
 - 6,000+ student members
 - 15 regions
 - 183 chapters
 - 300 student branches



- Industry Classification
 - Consulting engineers
 - Contractors
 - Manufacturers
 - Manufacturing representatives
 - Government, health and education
 - Design build
 - Architects
- U.S./Canada (45,000+)
- Global (11,000+)

ASHRAE Standard 189.1-2014, Standard for the Design of High-Performance Green Buildings

- Standard 189.1 provides total building sustainability guidance for designing, building and operating highperformance green buildings
- Has broader scope than Standard 90.1
- Partners with the International Code Council (ICC) for the International Green Construction Code (IgCC)
- Single resource on green buildings "IgCC powered by 189.1" to be published in summer 2018

ANSI/ASHRAE/USGBC/IES Standard 189.1-2014 (Supersides ANSI/ASHRAE/USGBC/IES Standard 189.1-2011)

Standard for the Design of High-Performance Green Buildings

Except Low-Rise Residential Buildings



A Compliance Option of the International Green Construction Code **

See Appendix H for approval does by the ASHRAE Standards Convertees, the ASHRAE Board of Directors, the U.S. Green Building Council, the Illuminating Engineering Society of Nerth America, and the American National Standards Institute,

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ASHRAE Standard 188, Legionellosis: Risk Management for Building Water Systems

- Beneficial for those in design, construction, installation, commissioning, operation, maintenance and service of centralized building water systems and components
- Standard 188 establishes minimum legionellosis risk management requirements for building water systems
- This is the foundation of the CDC's Toolkit entitled "Developing a Water Management Program to Reduce Legionella Growth and Spread in Buildings"



ANSI/ASHRAE Standard 188-2015

Legionellosis: Risk Management for Building Water Systems

Approved by the ASHRAE Standards Committee on May 27, 2015; by the ASHRAE Board of Directors on June 4, 2015; and by the American National Standards institute on June 26, 2015.

This Standard is under continuous maintenance by a Standarg Standard Poylet Committee (SSPC) for which the Standards Committee lase stabilished a documented program for regular publication of addends or revision, including procedures for timely, documented, contensius action on requests for change to any part of the Standard. The change submittal form, instructions, and deaditees may be obtained in electrics form from the ASHRAF website (www.sahra.org) or in paper form from the Senitor Marager of Standards. The latest edition of an ASHRAF Standard may be purchased from the ASHRAF website (www.sahra.org) or from ASHRAF Counters Service, (T) Titlle Circle, NR, Atlana, GA 301307-2035. E-mail: Orden(Stahrae.org, Fax: 678-539-1129, Telephone: 494-536-4900 (worktwide), or toll free 1-800-527-4723 (for orden in US and Cirands). For reprint permitision, ps to www.sahrae.org/permitsions.

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- Standard 90.4 was designed to ensure only the most inefficient data centers are non-compliant
- Is aggressive but has very achievable mechanical and electric efficiency requirements that save agencies money
- Data centers are often the largest energy users at an agency
- Works in concert with Standard 90.1



ANSI/ASHRAE Standard 90.4-2016

Energy Standard for Data Centers

Approved by the ASHRAE Standards Committee on June 29, 2016; by the ASHRAE Board of Directors on June 29, 2016; and by the American National Standards Institute on July 27, 2016.

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ASHRAE Standard 90.1-2016, Energy Standard for Buildings Except Low-Rise Residential Buildings

- Standard 90.1 is a benchmark for commercial building energy codes
- ASHRAE has set forth efforts to address plug load reduction and help design teams account for them when evaluating building loads with Standard 90.1
- "Regulated loads" are no longer included in a summary of energy savings in the Standard 90.1 revision in 2016
- Plug loads will continue to be a critical component in achieving Advanced Energy Design Guides

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Summary

- With the help of our industry leaders and volunteers who devote many hours of their time, we are continuously reaching our goal of providing resources to all stakeholders in the buildings industry
- ASHRAE has compiled an extensive webpage of resources on Advanced Energy Design Guides, which can be found at <u>www.ashrae.org/freeaedg</u>

