A new era for green building codes

The 2018-IgCC
Powered by 189.1

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Federal Interagency Sustainability Working Group
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Standard 189.1

v2009 → v2011 → v2014

IgCC

2010 Public Version Released → 2012-IgCC → 2015-IgCC

Std. 189.1 v2017

2018-IgCC

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Background of Standard 189.1

Motivated by environmental impacts of buildings
• U.S. buildings: 39% of CO₂ emissions; 40% of energy; 12% of water; 15% of GDP
• Site biodiversity; rainwater management; environmental emissions; construction materials and waste

Committee formed in 2006: Standard published in 2009

Revised in 2011 and 2014: Project compliance option in 2012 and 2015 IgCC

Again in 2014: 2015 IgCC compliance option

189.1-2017 Approved: Technical content of 2018 IgCC
189/IgCC/LEED Alignment

Motivations

• Multiple documents generating confusion in building community
• Maximize impact of all our hard work
• To make more buildings more sustainable

MOU signed July 2014: AIA, ASHRAE, ICC, IES & USGBC

• Applies in U.S. and Canada
• Committee will revise 189.1 using ASHRAE procedures
• ICC will develop administrative and enforcement structure around 189.1
Standard 189.1: The Basics

• Minimum design requirements for high-perf green buildings

• Co-sponsored by ASHRAE, ICC, IES and USGBC

• ANSI standard under ASHRAE's ANSI-approved procedures; 189.1 committee responsible for content; open to input from all

• Written in mandatory, enforceable language; suitable for reference by building codes and other regulations

Under revision via continuous maintenance

• Discrete changes (addenda), public review and approval
• Anyone can submit a proposed change any time (CMP)
Summary of 189.1 Sections

- **Site provisions** to reduce landscape impact, urban heat island, light pollution and storm water runoff
- **Water-use provisions** to reduce water use
- **Energy-use and efficiency provisions** to reduce energy use, emissions and peak demand
- **IEQ provisions** to help keep building occupants comfortable, healthy and productive
- **Materials provisions** to reduce impact on resources as well as earth and atmosphere (reduce, reuse, recycle)
- **Construction and plans for operation** to help the building operate as intended by design team
Major changes in 189.1-2017

75 individual addenda

All sections updated to reflect updates to referenced standards, new technical information, and more practitioner and enforcement experience

- Adds resilience to scope
- Requires electrical infrastructure for EV parking/charging
- Makes all water efficiency requirements mandatory, eliminating performance option
- Requires real-time display of energy use
- Requires occupant IEQ survey
ICC’s vision for local adoptions of the 2018-IgCC Powered by 189.1

- An **Adoptable, Useable** and **Enforceable MODEL** building code.
- 2018-IgCC technical provisions from ASHRAE 189.1
- Administration provision and publication by ICC
  - Why local adoptions
  - Local Adoption Process
  - Current IgCC adoptions
Tools

Tools in development for aiding adoption and implementation:

• User’s Manual

• Code and Commentary

• Certification

• Education and Training
  - 3 Formats: Onsite, Online, Webinars

• PPT Slide Deck
Upcoming promotions

- Webinars
- Social Media
- PPT Slide Deck
- Videos
How to get involved & learn more

• **Website(s)**
  - ASHRAE – Host
  - ICC
  - USGBC

• **Spread the Message**
  - Webinars
  - Social media
  - PPT Deck
2018 IgCC Timeline

**Fall 2017**
- ICC/ASHRAE meetings to consolidate documents
- All addenda incorporated into existing documents

**Spring/Summer 2018**
- Document published/released; Promotional efforts launched
- Results presented at Winter conference

**Winter 2018**

**Winter 2019**
Goals

"Working collaboratively with our industry partners is producing real results that will help improve building performance, streamline regulation, reduce cost and allow us to focus our resources on goals we have in common”

Dominic Sims, ICC
CEO
August 21, 2014
How to Get Involved in Standard 189.1

Join the committee listserv [www.ashrae.org/resources-publications/free-resources/](http://www.ashrae.org/resources-publications/free-resources/)

Attend a meeting as an observer
ASHRAE Winter and Annual meetings

Submit a public review comment [www.ashrae.org/public-review-drafts](http://www.ashrae.org/public-review-drafts)

Submit a change proposal [www.ashrae.org/standards-research--technology/standards--guidelines/continuous-maintenance](http://www.ashrae.org/standards-research--technology/standards--guidelines/continuous-maintenance)

Join the committee [www.ashrae.org/standards-research--technology/standards-forms--procedures](http://www.ashrae.org/standards-research--technology/standards-forms--procedures)
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