

**What is ASHRAE/USGBC/IESNA
Std 189.1P?
The Framework and Elements**

From the ASHRAE Winter meeting 2009

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Sponsors and Project Committee 189.1

- ▶ Consensus process
- ▶ Sponsor and co-sponsors:
 - ▶ ASHRAE - American Society of Heating, Refrigeration and Air Conditioning Engineers
 - ▶ USGBC (U.S. Green Building Council)
 - ▶ IESNA (Illuminating Engineering Society of North America)

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What is Standard 189.1P?

- ▶ A model code that provides standards for high-performance, green buildings
- ▶ 189.1 applies to all buildings except low-rise residential buildings (same as ASHRAE/IESNA Std 90.1)
- ▶ Not a design guide, not a rating system

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Scope of Standard 189.1

- ▶ Applies to ...
 1. new buildings and their systems.
 2. new portions of buildings and their systems.
 3. new systems and equipment in existing buildings.
- ▶ Addresses ...
 - ▶ site sustainability
 - ▶ water use efficiency
 - ▶ energy efficiency
 - ▶ indoor environmental quality (IEQ)
 - ▶ building's impact on the atmosphere, materials and resources

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Goals for Standard 189.1

- ▶ Establish mandatory criteria in all topic areas:
 - existing rating systems with few mandatory provisions
 - "green building" with no improvements in some areas
- ▶ Complement green building rating programs:
 - Std 189.1 is not intended to compete with green building rating programs

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Challenges

- ▶ Using normative (code) language
- ▶ Determining the stringency for a "minimum" standard
- ▶ Identifying standards or regulations to cite
 - (could not reference guidelines)*
- ▶ Prescribing universal strategies
 - (requirements for all, not a menu to choose from)*
- ▶ Coordinating with other U.S. National initiatives
 - ▶ *U.S. Federal agencies Memo of Understanding, American Institute of Architects, National Conference of Mayors*
- ▶ Creating something that is enforceable by AHJs
 - (authority having jurisdiction)*

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Development Process for Standard 189.1

- ▶ **June 2006:** Preliminary meeting
- ▶ **August 2006:** Review of 150 recommendations *including all 7 mandatory provisions (prerequisites) and all 69 optional credits in USGBC's LEED-NC program*
- ▶ **October, December 2006, January, March, April 2007:** 2-day meetings to develop/refine draft
- ▶ **May-July 2007:** *First public review*
- ▶ **August, October, December 2007:** 2-day meetings to assess comments & revise
- ▶ **February 2008:** *Second public review*
- ▶ **May, June 2008:** 2-day meetings to assess comments & revise
- ▶ **September 2008:** Responses sent back to all commentors
- ▶ **November 2008:** *Committee expanded*
- ▶ **January 2009:** First meeting expanded committee
- ▶ **April-June 2009:** *Third public review*

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Potential Users for Standard 189.1

- ▶ **Organizations with Green Building Rating Systems (USGBC, GBI):** incorporated as the baseline (prerequisite) in a green building rating system
- ▶ **Developers:** individual project
- ▶ **Corporations:** corporation buildings
- ▶ **Universities:** campus buildings
- ▶ **States/municipalities:** their own buildings
- ▶ **States/municipalities:** basis for incentives, such as zoning bonus for greater height
- ▶ **States/municipalities:** all private construction; may need to cite in multiple codes such as zoning, plumbing, energy, building

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Standard 189 Chapter Structure

- ▶ x.1: Scope
- ▶ x.2: Compliance
- ▶ x.3: Mandatory
(required for all projects)
- ▶ x.4: Prescriptive option
(simple option, very few calculations)
- ▶ x.5: Performance option
(more sophisticated, but more effort)

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Standard 189 Topic Areas

- ▶ Sustainable Sites
 - ▶ [3_mandatory_1_prescriptive/performance](#)
- ▶ Water Use Efficiency
 - ▶ [3_mandatory_2_prescriptive/performance](#)
- ▶ Energy Efficiency
 - ▶ [3_mandatory_1_prescriptive/performance](#)
- ▶ Indoor Environmental Quality (IEQ)
 - ▶ [7_mandatory_2_prescriptive/performance](#)
- ▶ The Building's Impact on the Atmosphere, Materials and Resources
 - ▶ [4_mandatory_1_prescriptive/performance](#)
- ▶ Construction and Operation Plans
 - ▶ [9_mandatory_0_prescriptive/performance](#)

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FURTHER INFORMATION

- ▶ Information on ASHRAE standards: www.ashrae.org
then follow "Standards",
includes listserv for Std 189.1
- ▶ Information on USGBC programs: www.usgbc.org
- ▶ Information on IESNA programs: www.iesna.org

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Questions



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