



www.ashrae.org/greenstandard

How does the standard differ from building rating systems?

Standard 189.1 covers site sustainability, water use efficiency, energy efficiency, indoor environmental quality and the building's impact on the atmosphere, materials and resources.

The standard is not a design guide or a rating system, though it is hoped that organizations responsible for the development of voluntary building rating systems will integrate this standard into their rating programs. Green building rating systems have been developed for implementation as a voluntary system and not to be implemented as mandatory requirements within a jurisdiction. They often provide a limited number of prerequisites with many optional credits to allow focus on the green building aspects most important to the user of the system. Standard 189.1 is primarily based on the mandatory requirements (with some elements allowing a choice between a prescriptive or performance options for compliance) that establish baseline criteria for a high-performance green building found in voluntary rating systems. Also, because Standard 189.1 is a code-intended standard, it references documents that are in normative language, meaning those documents are not just for informative purposes but are required for compliance with the standard.

How will this standard be used and by whom?

Standard 189.1 is a jurisdictional compliance option to the Public Version 1.0 of the International Green Construction Code (IgCC) published by the International Code Council. The IgCC regulates construction of new and remodeled commercial buildings. As such, Standard 189.1 could be implemented by a variety of users for a range of reasons, including:

- States/Municipalities
 - their own buildings
 - reach code or basis for incentives
 - private and public construction within a jurisdiction
- Organizations with green building rating systems (such as the U.S. Green Building Council and the Green Building Initiative): incorporated as the baseline (prerequisite) in a green building rating system
- Developers: individual projects
- Corporations: corporate buildings
- Universities: campus buildings

Does Standard 189.1 apply to all buildings?

Standard 189.1 covers high-performance green buildings and addresses the same group of building spaces as ANSI/ASHRAE/IES Standard 90.1, *Energy Standard for Buildings except Low-Rise Residential Buildings*:

- All nonresidential spaces
- All residential spaces in buildings more than three stories

Within these buildings, Standard 189.1 applies to the following elements of building projects:

- New buildings and their systems
- New portions of buildings and their systems
- New systems in existing buildings

Local jurisdictions can adopt Standard 189.1 as an alternate compliance option to the IgCC to apply to the above buildings. Standard 189.1 also can be used by local jurisdictions as a resource for starting a local green building program.

How much more energy efficient is Standard 189.1 than the current minimum building energy code (ANSI/ASHRAE/IESNA Standard 90.1-2007)?

The U.S. Department of Energy (DOE), through the National Renewable Energy Laboratory, has made a preliminary estimate based on Standard 189.1 as published. Applying the minimum set of prescriptive recommendations in the standard resulted in weighted average site energy savings of 27 percent when compared to Standard 90.1-2007.

How is renewable energy covered within the Standard?

Standard 189.1 requires that each building project be designed to be ready for renewable energy in the future. The prescriptive energy path also normally requires a certain amount of annual energy to be provided by on-site renewable energy systems. This requirement is a small increment but a necessary start toward the goal of net-zero-energy buildings that has been endorsed by ASHRAE and the co-sponsors.