



Shaping Tomorrow's
Built Environment Today

Standard 105

ANSI/ASHRAE Standard 105: “Standard Methods of Determining, Expressing and Comparing Building Energy Performance and Greenhouse Gas Emissions”

Purpose

To foster a commonality in determining and reporting the energy-related performance of buildings. To facilitate a comparison of design strategies and/or operation improvements in buildings as well as the development of building energy performance standards and reporting of greenhouse gas emissions associated with the design of new buildings and operation of existing buildings.

Significance

This standard provides the a common bases for reporting building energy use in terms of delivered energy forms and expressions of energy performance, comparing design options, and comparing energy performance in terms of energy resources used and greenhouse-gas emissions created, both across buildings and for energy-efficiency measures within.

Scope

Covers new buildings and existing buildings or portions thereof, the determination and expression of building energy use and the greenhouse gas emissions associated with that energy use; and techniques for the comparison of the energy performance and associated greenhouse gas emissions between different buildings, alternative designs for the same new building, or improvements in the operation of existing buildings.

It does not establish building energy or greenhouse gas emissions goals or limits, present a method for certification of prediction methodology, such as computer program, address embodied energy of building materials and systems, or incorporate transportation energy or associated greenhouse gas emission for building functions, including commuting, business travel and process transportation.



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Government Use of Standard 105-2014

- Standard 105 is used in the U.S. Department of Energy publication *A Common Definition for Zero Energy Buildings*, September 2015.

Additional Benefits/Facts

- Provides commonality in reporting building energy performance to provide consistent methods of measuring, expressing and comparing.
- Provides common basis for comparing energy performance in terms of energy resources used and greenhouse gas emissions across buildings for energy efficiency measures within buildings.
- Written in code-compatible language, allowing for easier adoption by code-writing organizations.
- Use of the standard requires adoption of conversion factors for the various energy sources. An informative appendix with conversion factors is provided.

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