BUILDING ENERGY CODES PROGRAM



Energy Efficiency & Renewable Energy



ANSI/ASHRAE/IES Standard 90.1-2016: Overview

Eric Makela Director Codes New Buildings Institute

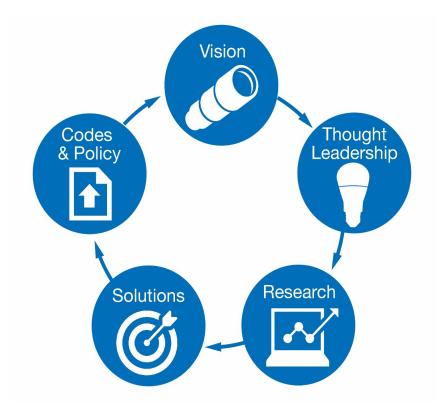
March 2017

New Buildings Institute (NBI)

NBI is redefining energy efficiency in the built environment.

Program Areas:

- Best practices in new and existing buildings
- Continuous code and policy innovation
- Zero energy leadership and market development





ENERGY Energy Efficiency & Renewable Energy

New Buildings Institute would like to thank Energy Trust of Oregon, Northwest Energy Efficiency Alliance, and CLEARresult for funding and coordinating this training

New Buildings Institute would like to thank PNNL and DOE for making this presentation available.

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- 1 Purpose
- 2 Scope
- 3 Definitions, Abbreviations, and Acronyms
- 4 Administration and Enforcement
- 5 Building Envelope
- 6 Heating, Ventilating, and Air Conditioning
- 7 Service Water Heating
- 8 Power
- 9 Lighting
- 10 Other Equipment
- 11 Energy Cost Budget Method
- 12 Normative References
- Normative Appendices A-H

STANDARD

ANSI/ASHRAE/IES Standard 90.1-2016 (Sopenedes ANSI/ASHRAE/IES Standard 90.1-2013) Includes ANSI/ASHRAE/IES addenda Isted in Appendix H

Energy Standard for Buildings Except Low-Rise Residential Buildings (1-P Edition)

See Appendix IN for approval does by the ADMAE Standards. Committee, the ADMAE Soard of Directors, the IES Soard of Directors, and the American National Standards Institute.

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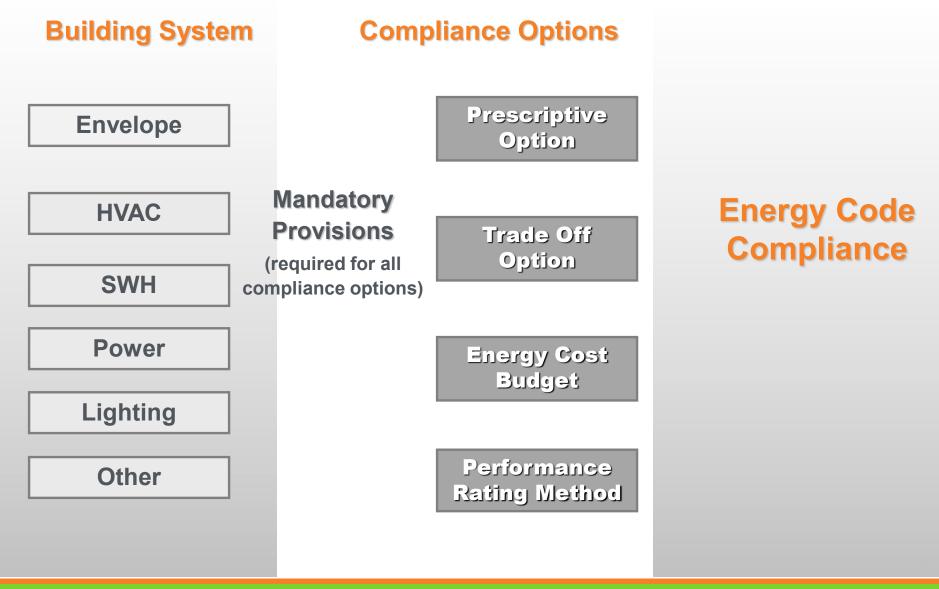
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- Applies to:
 - New buildings and their systems
 - New portions of *buildings* and their systems
 - New systems and equipment in existing buildings, and
 - New equipment or building systems specifically identified in the standard that are part of industrial or manufacturing processes
 - Criteria for determining compliance with requirements
- Does not apply to:
 - Single-family houses, low-rise multi-family
 3 stories above grade, manufactured houses (mobile or modular)
 - Buildings that use neither electricity nor fossil fuel
- Certain other buildings or elements may be exempt
- Does not circumvent any safety, health, or environmental requirements



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Compliance Path

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Compliance Paths for 2016

- 1. Prescriptive
- 2. Energy Cost Budget
- 3. Appendix G (New)
- 4.2 Compliance
- 4.2.1 Compliance Paths

4.2.1.1 New Buildings

New buildings shall comply with either the provisions of

a. Section 5, "Building Envelope"; Section 6, Heating, Ventilating, and Air Conditioning"; Section 7, Service
Water Heating; Section 8, "Power"; Section 9, "Lighting"; and Section 10, "Other Equipment," or

- b. Section 11, "Energy Cost Budget Method," or
- c. Appendix G, "Performance Rating Method."

STANDARD
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