



To meet the City’s goal of reducing greenhouse emissions by 30% by 2030, the New York City Energy Conservation Code (NYCECC) sets energy-efficiency standards for new construction and alterations to existing buildings.

Property owners must be sure that their architects’ or engineers’ plans comply with the Energy Code – and that their contractors are following those drawings.

NYC Energy Conservation Code

The NYC Energy Conservation Code amends the 2007 New York State Energy Conservation Construction Code. It regulates design, as well as inspections and testing during construction. This Code allows buildings (except low-rise residential) to comply with the 2004 edition of ASHRAE/IESNA Standard 90.1 as an alternative to Chapter 8 of the Energy Code.

The Energy Code Outlines Efficiency Standards for the Following Systems:

- **Envelope Systems:** insulation values; fenestration thermal and solar heat gain values; moisture control; air barrier; containment of required openings; and sealing and air-tightness.
- **HVAC and Service Hot Water Systems:** equipment sizing; equipment efficiencies; economizers; energy recovery; controls; duct sealing; and duct and piping insulation.
- **Lighting and Power Systems:** allowable interior and exterior lighting wattage; fixtures; lamp, ballast and transformer efficiencies; lighting control systems; and dwelling unit meters.

How to Comply With the Energy Code

1. **Professional Statement** – PW1 form, Section 10. Check the statement of compliance or the statement of exemption. If the exemption applies, cite the proper Energy Code section.
2. **Owner Statement** - PW1 form, Section 26. Owners must attest that they won’t knowingly authorize work that violates the Energy Code.
3. **Energy Analysis** - Applicants must tell the Department how they’ll comply with the Energy Code. The Energy Analysis must be in an application’s initial filing, on a sheet in the drawing set. Applicants may use any of the following four formats as applicable:
 - **REScheck.** This energy software may be used for: new residential buildings and additions or alterations to existing residential buildings (provided a whole building analysis is performed). Only 2007 New York State version of the software is accepted. Note that the terms “Residential” and “Commercial” have specific, defined meanings under the Energy Code.
 - **COMcheck.** This energy software program may be used for new Commercial buildings. Applicants may use this for additions and/or alterations, but only if the software edition allows applicants to explicitly identify the project as an addition or alteration. Only the 2007 New York State version of the software may be used, except that if ASHRAE/IESNA Standard 90.1 has been used for the design then the 2004 ASHRAE/IESNA Standard 90.1 version of the software may be used.
 - **EC1 Worksheet.** Applicants may use the Department’s Energy Cost Budget Worksheet (EC1) to report inputs and outputs of the DOE-2 energy modeling program when they’ve used total building performance energy modeling to demonstrate Energy Code compliance for new buildings, additions or alterations.
 - **Tabular comparison.** Applicants may create a table for alterations to show the scope of each item as it relates to the Energy Code, the proposed energy value and the Energy Code prescriptive value. This table must follow instructions at nyc.gov/buildings. (See Energy Code under Reference Materials on the home page.)
4. **Supporting Documentation** - Approved construction documents must show construction types and energy values outlined in the Energy Analysis for the envelope systems, HVAC and service hot water systems, and lighting and power systems. These documents must also show any mandatory requirements not included in the Energy Analysis. These can include envelope sealing, controls for mechanical and lighting systems, duct sealing, and duct and piping insulation.

Additional Resources:

nyc.gov/buildings
energycodes.gov

getenergysmart.org
powernaturally.org

dos.state.ny.us/code
iccsafe.org/education

resourcecenter.pnl.gov

