NYC GREEN CODES
LEGISLATION AT A GLANCE

GCTF Proposal
Ensure New Energy Systems Function Properly

Implemented
2014 NYC Energy Conservation Code, Section C408

Summary
Commissioning is a quality assurance process that is not commonly performed for building systems in new construction. Commissioning helps identify and correct deficiencies in design or installation, resulting in higher energy efficiency and building performance.

This legislation establishes guidelines for the commissioning of building mechanical systems in all commercial buildings and residential buildings over three stories. The requirements include providing a commissioning plan and a report that outlines system deficiencies prior to a building passing its final inspection, as well as a post-occupancy report.

New Requirements or Changes
Effective: January 1, 2015. These changes do not apply retroactively; they are only triggered when construction activity requires a permit for work covered by this section of the code.

Amendments to the New York City Energy Conservation Code:

• Section C408.2:
  o Requires a detailed commissioning plan for mechanical, renewable energy, and service water heating systems, including but not limited to:
    1. Heating, cooling, air handling and distribution, ventilation, and exhaust systems, and their related air quality monitoring systems.
    2. Air, water, and other energy recovery systems.
    3. Manual or automatic controls, whether local or remote, on energy using systems such as temperature controls, setback sequences, and occupancy based control, including energy management functions of the building management system.
    4. Plumbing, including insulation of piping and associated valves, domestic and process water pumping, and mixing systems.
    5. Mechanical heating systems and service water heating systems.
    6. Refrigeration systems.
    7. Renewable energy and energy storage systems.
    8. Other systems, equipment and components that are used for heating, cooling or ventilation and that affect energy use.
  o Exceptions are made for systems in buildings where the total installed mechanical equipment capacity is less than 480,000 Btu/h cooling capacity and 600,000 Btu/h heating capacity.
• Section C408.2.4:
  o Requires a Preliminary Commissioning Report that outlines any deficiencies found during testing and/or any tests deferred due to climatic conditions. Buildings cannot pass the final mechanical inspection without confirmation that
A code official has received this report.

- **Section C408.2.5:**
  - Requires the submission of a Final Commissioning Report, which includes all test procedures and results, including those performed after occupancy.
  - Requires the report to be provided within 30 months of being issued a certificate of occupancy for buildings 500,000 gross square feet or greater, excluding apartment buildings. Code officials may grant time extensions based on cause of delay.
  - Requires the report to be provided within 18 months of being issued a certificate of occupancy for all other buildings and apartment buildings.

- **Section C408.3:**
  - Requires functional testing for lighting systems to ensure that control hardware and software is properly installed and working.
  - Confirms that sensors are appropriately functioning to reduce electric light use based on natural light or occupancy and/or that switches and controls are programmed to switch lights off.

**Enforcement**

These new and revised provisions are standard parts of the Energy Code. They will be enforced by the Department of Buildings in the same manner as any other element of the code.

**Implementation**

There are no known implementation issues for this proposal. There are many firms that perform new building commissioning.