

Information Sheet: Commercial Energy Code Compliance

The following applies to buildings other than one- and two-family dwellings, townhouses and Groups R-2, R-3, and R-4 three stories or less. Work must fully comply with the requirements of the 2018 International Building Code (IBC) and the 2018 International Energy Conservation Code (IECC). To help determine which code applies to your project, refer to the flowchart found here: [Which Code Do I Use](#). The following requirements apply to all applications submitted on or after April 1, 2019, unless otherwise noted.

I. Compliance Path Options

For building types described above, permit applicants may choose between two major compliance paths: The 2018 IECC or ASHRAE 90.1-2016. Both have additional compliance options including prescriptive and performance-based options. For more information, refer to: [Energy Code Compliance Path Flowcharts](#).

A. Optional Above Code Programs Alternative

Acceptable above code programs for IBC-scope buildings are limited to ENERGY STAR™ New Homes and ENERGY STAR Multifamily New Construction certifications.¹ The permit application shall be accompanied by reports per the corresponding section of the [L&I Residential Energy Code Compliance Information Sheet](#) or an ASHRAE 90.1 modeling report. To receive a certificate of occupancy, permit holders choosing this optional compliance path shall provide an ENERGY STAR certificate or PECO New Home Rebates certificate to the inspector.²

B. Optional Performance Alternative

The permit application shall be accompanied by an ASHRAE 90.1 modeling report in accordance with ASHRAE 90.1-2016 Section 11 or Appendix G.

II. Information on Construction Documents

A. Mechanical Systems Commissioning (Cx) (C408.2)

If mechanical systems and service water heating commissioning will not be performed, construction document notes shall clearly indicate total building cooling equipment capacity and combined mechanical systems and service water heating equipment capacity. If the total building cooling equipment capacity is $\geq 480,000$ Btu/h, or the combined mechanical systems and service water heating equipment capacity is $\geq 600,000$ Btu/h, construction document notes shall clearly indicate provisions for mechanical systems commissioning and completion requirements in accordance with IECC Section C408.2. Systems included in Section C403.5 that serve individual dwelling units are not required to be commissioned. Effective July 1, 2019, the company name and contact information of an *approved* commissioning agent shall be included on the construction document notes.

B. Reporting Specifications

A system balancing report and final commissioning report shall be provided to the owner within 90 days of the date of receipt of the certificate of occupancy. The final Cx report shall include:

- a. Results of functional testing;
- b. Disposition of deficiencies found during testing, including details of corrective measures used or proposed;
- c. Functional performance test procedures used during the commissioning process including measurable criteria for test acceptance.

¹ Other building certifications may be deemed acceptable by the department when the applicant provides an ASHRAE 90.1-2016 modeling report demonstrating the building is designed to use less energy than the budget building design.

² A temporary certificate of occupancy may be issued to allow for completion of final certification paperwork.

C. **Approved Commissioning Agents**

The following items are required for all applications submitted on or after July 1, 2019:

- a. **Third-party Entities** independent from the design and construction of the project.
- b. **Certification:** Entities completing and carrying out the commissioning plan must hold one of the following certifications:
 - [ACG Certified Commissioning Authority \(CxA\)](#)
 - [AEE Certified Building Commissioning Professional \(CBCP\)](#)
 - [ASHRAE Building Commissioning Professional \(BCxP\)](#)
 - [BCA Certified Commissioning Professional \(CCP\)](#)
 - [NEBB Commissioning Process Professionals \(CxPP\)](#)

CI. **Approved Testing & Balancing (TAB) Contractors**

Effective July 1, 2019, entities performing mechanical systems testing and balancing shall hold one of the following certifications:

- [TABB TABB Certification](#)
- [NEBB Testing, Adjusting & Balancing \(TAB\) Certified Professional and Certified Technician](#)
- [AABC Test and Balance Engineer and Test and Balance Technician](#)
- [NBC Certified Balancing Technician and Certified Balancing Supervisor](#)

III. **Lighting Functional Testing**

Construction drawings shall specify that the following items will be provided to the building owner or owner's authorized agent within 90 days of receipt of the certificate of occupancy:

- a. Drawings that include the location and catalogue number of each lighting control;
- b. An operating and maintenance manual;
- c. A report of functional testing including results, deficiencies, and corrective actions

IV. **Commissioning Plan, Inspections and Testing**

A. **Commissioning Plan**

A commissioning plan shall be developed and provided to the owner and be made available for L&I review upon request for buildings requiring mechanical systems commissioning. The commissioning plan shall include:

- a. A narrative description of the activities that will be accomplished during each phase of commissioning, including the personnel intended to accomplish each of the activities;
- b. A listing of the specific equipment, appliances or systems to be tested and a description of the tests to be performed;
- c. Functions to be tested including, but not limited to, calibrations and economizer controls;
- d. Conditions under which the test will be performed;
- e. Measurable criteria for performance.

B. **Prerequisites for Scheduling Final Inspections**

The following documents shall be provided prior to final inspection:

- a. [Commissioning Compliance Checklist](#);
- b. Preliminary Commissioning Report;
- c. Building Operations and Maintenance Documents.