

## FAQ:

**Existing rooftop equipment must be replaced with equipment of the same capacity. The equipment serves interior ductwork that provides conditioned air to separate commercial tenants within the building. Does the replacement of existing rooftop equipment require completed system commissioning as outlined for new construction per 2018 IECC Section C408?**

### Background:

*Alterations* are defined under IECC Chapter 2 [CE] as listed below. The work described under this FAQ which includes complete replacement of existing equipment is considered an *alteration*:

**ALTERATION.** Any construction, retrofit or renovation to an existing structure other than repair or addition. Also, a change in a building, electrical, gas, mechanical or plumbing system that involves an extension, addition or change to the arrangement, type or purpose of the original installation.

2018 IECC Section C503.1, which regulates *alterations* in general, and C503.4, which regulates *alterations* to heating and cooling systems specifically, outline the level of compliance with current IECC provisions required for any *alterations* work. IECC Section C503.1 and C503.4 read:

**C503.1 General.** Alterations to any building or structure shall comply with the requirements of Section C503 and the code for new construction. Alterations shall be such that the existing building or structure is not less conforming to the provisions of this code than the existing building or structure. Alterations to an existing building, building system or portion thereof shall conform to the provisions of this code as those provisions relate to new construction without requiring the unaltered portions of the existing building or building system to comply with this code.

**C503.4 Heating and cooling systems.** New heating, cooling and duct systems that are part of the *alteration* shall comply with Sections C403.

System Commissioning requirements are outlined and stipulated for building systems under IECC Section C408. As such, because neither IECC Sections C503.1 or C503.4 reference Section C408 for compliance of systems undergoing *alterations*, System Commissioning is not a provision of compliance for *alterations* work.

### Answer:

No - system commissioning is not required for the work described in this FAQ which would be considered *alterations* work within an existing *building* or structures.

---

### Questions?

Call 311 or (215) 686-8686 (if outside Philadelphia) or submit a permit-related question online via <https://form.jotform.com/81494420572154>.

### L&I Permit and License Center

1401 John F. Kennedy Blvd., Municipal Services Building, Public Service Concourse  
Open 8 a.m. to 3:30 p.m., Monday through Friday. Offices close at noon on the last Wednesday of each month.

**Disclaimer:**

This interpretation, policy or code application is intended to provide guidance to staff for consistency of review and is subject to change without notice. Application of this interpretation, policy or code application to specific projects may vary. There may be other ways to comply with the Code. If so, you are not required to use this method. You may want to investigate other options, or consult with a professional identifying an equally code compliant solution.

**L&I Permit and License Center**

1401 John F. Kennedy Blvd., Municipal Services Building, Public Service Concourse  
Open 8 a.m. to 3:30 p.m., Monday through Friday. Offices close at noon on the last Wednesday of each month.