LEED BD+C: Retail | v1.0 pilot

Fundamental commissioning of the building energy systems

EAp1 | Required

Intent

Verify that the building's energy related systems are installed, calibrated and perform according to the owner's project requirements, basis of design, and construction documents.

Benefits of commissioning

Benefits of commissioning include reduced energy use, lower operating costs, reduced contractor callbacks, better building documentation, improved occupant productivity, and verification that the systems perform in accordance with the owner's project requirements.

Requirements

The following commissioning process activities shall be completed by the commissioning team, in accordance with the LEED-NC 2.2 Reference Guide.

1) Designate an individual as the Commissioning Authority (CxA) to lead, review and oversee the completion of the commissioning process activities.

a) The CxA shall have documented commissioning authority experience in at least two building projects.
b) The individual serving as the CxA shall be independent of the project's design and construction management, though they may be employees of the firms providing those services. The CxA may be a qualified employee or consultant of the Owner.
c) The CxA shall report results, findings and recommendations directly to the Owner.
d) For projects smaller than 50,000 gross square feet, the CxA may include qualified persons on the design or construction teams who have the required experience.

2) The Owner shall document the Owner's Project Requirements (OPR). The design team shall develop the Basis of Design (BOD). The CxA shall review these documents for clarity and completeness. The Owner and design team shall be responsible for updates to their respective documents.
3) Develop and incorporate commissioning requirements into the construction documents.
4) Develop and implement a commissioning plan.
5) Verify the installation and performance of the systems to be commissioned.
6) Complete a summary commissioning report.

Commissioned Systems

Commissioning process activities shall be completed for the following energy-related systems, at a minimum:

- Heating, ventilating, air conditioning, and refrigeration (HVAC&R) systems (mechanical and passive) and associated controls
- Lighting and daylighting controls
- Domestic hot water systems
- Renewable energy systems (wind, solar etc.)