| v3 - LEED 2009

Fundamental commissioning of building energy systems

EAp1 | Required

Glossary

Intent

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

Benefits of commissioning include reduced energy use, lower operating costs, fewer 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 must be completed by the project team:

- Designate an individual as the commissioning authority (CxA) to lead, review and oversee the completion of the commissioning process activities.
- The CxA must have documented commissioning authority experience in at least 2 building projects.
- The individual serving as the CxA must be independent of the project's design and construction management, though the CxA may be an employee of any firms providing those services. The CxA may be a qualified employee or consultant of the owner.
- The CxA must report results, findings and recommendations directly to the owner.
- For projects smaller than 50,000 gross square feet (4,500 gross square meters), the CxA may be a qualified person on the design or construction teams who has the required experience.
- The owner must document the owner's project requirements. The design team must develop the basis of design. The CxA must review these documents for clarity and completeness. The owner and design team must be responsible for updates to their respective documents.
- Develop and incorporate commissioning requirements into the construction documents.
- Develop and implement a commissioning plan.
- Verify the installation and performance of the systems to be commissioned.
- Complete a summary commissioning report.

Commissioned Systems

Commissioning process activities must be completed for the following energy-related systems, at a minimum (if they are installed as part of the core and shell project):

- 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 (e.g. wind, solar).