

BETTERBRICKS


LEED: Opportunities and Challenges for the Commissioning Industry

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Introduction

- Brief background
- Issues
 - Cx provider qualifications
 - Cx provider independence
 - Cx process requirements
- Conclusions
- Opportunities



Background



Background

Before LEED

- ❑ Building Commissioning was well-established, although not quite “business as usual”
- ❑ CX met a need to ensure higher quality in building projects

Background

After LEED

- ❑ High demand for CX services
- ❑ Shortage of experienced providers
- ❑ More project complexity

Background

As a Result

- ❑ Many owners are procuring CX services for the first time
- ❑ Many CX providers are learning “on the job”
- ❑ Some concerns about the future of the profession of new building commissioning

Who is a qualified CX provider?



Commissioning is now offered by:

- Traditional ME firms
- Test and Balance companies
- Mechanical contractors
- Mechanical service providers
- Architects
- Construction companies



Who is a qualified CX provider?



- Certification is rarely required
- LEED requires experience in two projects
- Available certification requirements vary widely
- Still no universal consensus, despite much discussion



CX Provider Certification



Organization	Number Of Levels	Minimum Experience	Exam	Fee	Oversight	Comment
ACG AABC Commissioning Group	1, Certified Commissioning Authority (CxA)	3 commissioning projects, Must be Registered Architect, Professional Engineer or certified Test and Balance Engineer (TBE)	YES	\$250 + \$1,500/ yr	Quality Assurance Program	Stress Independence
AEE Association of Engineers	1, Certified Building CX Professional (CBCP)	Combination of education and experience in a variety of fields, or be a Certified Energy Manager (CEM)	YES	\$200 + \$200 every 3 years	None listed	Continuing education is required for renewal
BCA Building Commissioning Association	1, CCP, Certified Commissioning Professional	4 year building science related degree and 3 years project experience or equivalent	YES	\$500 includi ng exam	Formal peer review process	Organization established by practicing cx professionals

CX Provider Certification						
Organization	Number Of Levels	Minimum Experience	Exam	Fee	Oversight	Comment
NEBB National Environmental Balancing Bureau	Certified by building system, currently 3	Must meet qualifications as a NEBB firm and have an individual to supervise with a combination of education and experience	YES	Varies, up to \$2,000 to initiate + a yrly fee	Annual exam	Oriented toward contractors
University of Wisconsin	4 levels	Varies by level. Some experience and work samples required for top levels.	YES	\$375	Recertify every 5 yrs	Administered by Department of Engineering Professional Development.

Is CxP independence still an issue?

Yes

Common procurement paths include:

- CxP part of the design/build team
- CxP hired by architect
- Design firm has Cx department

Is CxP independence still an issue?

“The CA is an objective, independent advocate of the owner who leads, plans, schedules and coordinates the commissioning team. If the CA’s firm has other project responsibilities, or is not under direct contract to the owner, a conflict of interest exists.”

Building Commissioning Association, *Essential Attributes of Building Commissioning*

Is CxP independence still an issue?



“The Commissioning Authority will be an independent contractor and not an employee or subcontractor of the General Contractor or any other subcontractor on this project, including the design professionals.”

Desired Qualifications, ASHRAE Guideline 0, Annex E

Is CxP independence still an issue?



“Engage a commissioning team that does not include individuals directly responsible for project design or construction management.”

LEED-NC Version 2.1 Rating System

Is CxP independence still an issue?



“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.”


LEED-NC Version 2.2 Rating System

Opportunity



Building Commissioning is
in the spotlight

Opportunity



Time to Increase Education & Training

- Owners
 - Why Cx is needed
 - Who should do it
 - What to expect
- Providers
 - In-depth, hands-on
 - Shared experience
 - Reaffirm core attributes

Opportunity



- Your ideas?
- Questions?
