
BEYOND
SMART CITIES
CERTIFIED COMMISSIONING SPECIALIST
CCXS ONLINE TRAINING
KRISHNAJI PAWAR, LEED AP BD+C,GSAS CGP,ISO 14001:2015,GCP
COMMISSIONING SPECIALIST CURRICULUM


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SMART CITIES
CXA iMPORTANT CHARACTERISTICS
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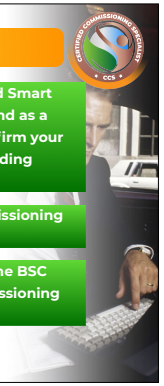

LEARNING OBJECTIVES
important Characteristics of Commissioning

CXA IMPORTANT CHARACTERISTICS

Below are the CXA iMPORTANT CHARACTERISTICS of the Beyond Smart Cities(BSC). These Attributes have been adopted by the BGBC, and as a condition of candidacy and certification as an CCxS you must affirm your willingness to abide by the BSC important characteristics of Building Commissioning.

The BSC believes that diverse and creative approaches to commissioning benefit the discipline of building commissioning and its clients.

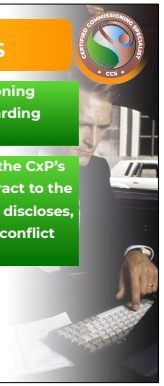
The attributes described herein are called “essential”, because the BSC believes that they are, in fact, essential to every effective commissioning process.



CXA IMPORTANT CHARACTERISTICS

1.The Commissioning Provider (CxP) is in charge of the commissioning process and makes the final recommendations to the owner regarding functional performance of the commissioned building systems.

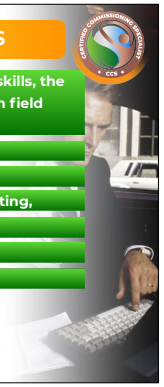
2.The CxP is an objective, independent advocate of the Owner. If the CxP’s firm has other project responsibilities, or is not under direct contract to the Owner, a conflict of interest exists. Wherever this occurs, the CxP discloses, in writing, the nature of the conflict and the means by which the conflict shall be managed.



CXA IMPORTANT CHARACTERISTICS

3.In addition to having good written and verbal communication skills, the CxP has current engineering knowledge, and extensive hands-on field experience regarding:

- Building systems commissioning,
- Technical knowledge of building systems,
- Building systems start-up, balancing, testing and troubleshooting,
- Operation and maintenance procedures,
- The building design and construction processes,
- Automated control systems and control logic.



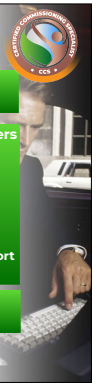
CXA IMPORTANT CHARACTERISTICS

4.For each project, the commissioning purpose and scope are clearly defined in the CxP contract.

5.The CxP recommends the commissioning roles and scope for all members of the design and construction teams be clearly defined in:

- Each design consultant's contract,
- The construction manager's contract,
- General Conditions of the Specifications,
- Each division of the specifications covering work to be commissioned, and
- The specifications for each system and component for which the suppliers' support is required.

6.Each project is commissioned in accordance with a written commissioning plan that is updated as the project progresses.



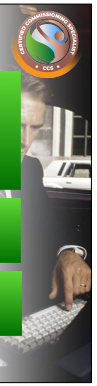
CXA IMPORTANT CHARACTERISTICS

The commissioning plan:

- Identifies the systems to be commissioned,
- Defines the scope of the commissioning process,
- Defines commissioning roles and lines of communications for each member of the project team, and
- Estimates the commissioning schedule.

7.On new building commissioning projects, the CxP reviews systems installation for commissioning related issues throughout the construction period.

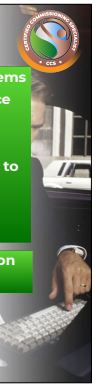
8.All commissioning activities and findings are documented as they occur. Issues are tracked through resolution and acceptance. These reports are distributed as they are generated and included in the final report.



CXA IMPORTANT CHARACTERISTICS

9. The functional testing program objectively verifies that the building systems within the commissioning scope of work perform interactively in accordance with the Project Documents. Written, repeatable test procedures, prepared specifically for each project, are used to functionally test components and systems in all modes of operating conditions6. These tests are documented to clearly describe the individual systematic test procedures, the expected systems response or acceptance criteria for each procedure, the actual response or findings, and any pertinent discussion.

10.The commissioning authority provides constructive input for the resolution of system deficiencies.



CXA IMPORTANT CHARACTERISTICS

11.Every commissioning project is documented with a commissioning report that includes:

- An executive summary including an overview of the implemented commissioning process, the systems commissioned, the major findings and the operating condition of the systems at the completion of functional testing,
- Issues that were discovered and the measures taken to correct them,
- Unresolved operational issues that were accepted by the owner, along with related recommendations,
- Operational and ongoing commissioning recommendations based on information discovered during commissioning,
- Functional test procedures and results,
- Reports that document all commissioning field activities as they progress, and
- A description and estimated schedule of required deferred testing

