Commissioning Process
Certifications:

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QCxP, BECxP, CxA+BE, CxAP, CxM, CxTS, and GCxP are Service Marks of the University of Wisconsin-Madison
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Certifications for Commissioning Process Professionals

Certification for Educational Achievement

- Qualified Commissioning Process Provider (QCxP<sup>SM</sup>) or (QCP<sup>SM</sup>)
- Building Enclosure Commissioning Process Provider (BECxP<sup>SM</sup>)
- Commissioning Authority + Building Enclosure (CxA+BE<sup>SM</sup>)

Certifications for Educational Achievement Plus Documented Experience

- Commissioning Process Authority Professional (CxAP<sup>SM</sup>) or (CAP<sup>SM</sup>)
- Commissioning Process Manager (CxM<sup>SM</sup> or CXM<sup>SM</sup>)
- Commissioning Process Technical Service Provider (CxTS<sup>SM</sup>) or (CTS<sup>SM</sup>)
- Green Commissioning Process Provider (GCxP<sup>SM</sup>, (GCP)<sup>SM</sup>)

Introduction

Background

The University of Wisconsin–Madison initiated the development of a certification program for individuals involved in the Commissioning Process (CxP) in 2001, with a formal program launched in February 2003. The purpose of this program is to provide in-depth training and professional recognition, establishing a benchmark for commissioning professionals and supporting providers. The knowledge and experience demonstrated through the completion of the certification requirements are critical for success in implementing the Commissioning Process, which reduces the cost and improves the quality of constructed projects and existing buildings. These certifications can be used as one standard upon which to judge the expected performance of a commissioning authority, manager, or providers of related services. A primary objective of the program is to establish a rigorous, independently evaluated level of accomplishment, so that any individual who receives a University of Wisconsin–Madison certification will be capable of providing value to projects using the principles of the Commissioning Process.
Philosophy of the Commissioning Process

The Commissioning Process is a proven method to consistently deliver cost-effective, quality buildings and construction projects. This includes:

- New buildings, facilities, and construction projects
- Identification of functional requirements and needs in existing buildings
- Commissioning existing facilities
- Building and process rehab and modification
- Sustainable and green buildings
- Energy projects
- Design-build
- ESCO projects
- Performance contracts
- Construction management at risk, and
- Other construction and development projects

Although there are several guidelines on CxP practice, the University of Wisconsin–Madison certifications follow the Commissioning Process principles established by the American Society of Heating, Refrigerating, and Air-Conditioning Engineers/National Institute of Building Sciences (ASHRAE/NIBS) Guideline 0-2005, 3-2006, and 1.1-2007.

Distinction in the Marketplace

The University of Wisconsin–Madison Commissioning Process certifications offer a unique distinction in the industry, as they provide the opportunity for individuals with varying levels of professional experience to gain recognition. This feature, in addition to the focus on the full Commissioning Process, creates an opportunity for individuals to distinguish their capabilities in a way not possible in many other certification programs.

The CxAP, CxM, CxTS, and GCxP documented experience certifications are considered equal in recognizing knowledge of the Commissioning Process, but differ to highlight the unique career focus of individuals involved in the practice of the CxP. Some successful applicants have earned more than one experience certification, due to their career history in various roles of implementing the Commissioning Process.

The University of Wisconsin–Madison Commissioning Process certifications are educational certifications. They recognize educational achievement in knowledge of the Commissioning Process. The CxAP, CxM, CxTS, and GCxP further demonstrate experience in applying that knowledge to projects.
Descriptions of Certifications for Educational Achievement

Everyone who completes the required education and successfully completes the CxP Provider exam will receive the QCxP. Those who complete the required building enclosure education and successfully complete the Building Enclosure CxP exam will receive the BECxP, CxA+BE, or both. There is no application form for the QCxP, BECxP, or CxA+BE.

Accredited Qualified Commissioning Process Provider (QCxP℠), (QCP℠)

Purpose:
To provide a level of recognition for those who have acquired an understanding of the Commissioning Process through education and demonstrated a minimum level of understanding of the Commissioning Process through an examination.

Description:
As the Commissioning Process continues to grow in the industry, there are many individuals who have gained significant knowledge of the CxP and may wish to differentiate themselves from those providing traditional commissioning services. The QCxP offers these individuals an opportunity to be recognized for their knowledge. All applicants who have completed the educational requirement and successfully passed the CxP Provider examination will be awarded the QCxP. The QCxP will be valid for five years. During those five years, it is expected that the candidate will actively implement the Commissioning Process in order to meet the requirements for one of the four documented experience certifications. At the end of five years, the certificate holder will have the option to renew the QCxP if he or she has not earned one of the documented experience certifications. This option will allow flexibility for those needing more time to complete ongoing projects, or for those who wish to maintain the QCxP as a credential because they are not directly involved in implementing or managing commissioning activities on projects (such as related project team members or educators). Details on the renewal process are included later in this document. Once an applicant has achieved one of the documented experience certifications, the QCxP expires.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one’s name shall be noted by: QCP or QCxP.

Requirements:

- Completion of the approved Commissioning Process education
- Successful completion of the UW–Madison CxP Provider examination
Accredited **Building Enclosure Commissioning Process Provider (BECxP℠)**

and

Accredited **Commissioning Authority + Building Enclosure (CxA+BE℠)**

**Purpose:**

To provide a level of recognition for those who have acquired an understanding of the Commissioning Process specific to building enclosures, as demonstrated through education and examination.

**Description:**

The building enclosure is frequently the most costly aspect of a new building and is usually the most difficult and costly to correct after construction. The BECxP and CxA+BE certifications were developed to recognize and encourage the use of the Commissioning Process principles for building enclosures. The two certifications include:

- **BECxP:** It is extremely valuable to have someone on the CxP team who is an expert in the design, construction, and maintenance of building enclosures. This individual provides the technical knowledge and experience to implement specific building enclosure CxP activities that verify the installed building enclosure meets the owner’s requirements.

- **CxA+BE:** An individual holding CxA+BE is a leader of the Commissioning Process team, usually defined as the commissioning process authority, who also has sufficient building enclosure knowledge to lead the team in Commissioning Process activities specific to the building enclosure.

All applicants who have completed the building enclosure educational requirement and successfully passed the Building Enclosure CxP examination will be awarded either the BECxP, CxA+BE, or both. The Building Enclosure CxP examination is divided into two parts: Commissioning Process Principles (Part 1) and Building Enclosure Principles (Part 2). The BECxP is awarded to those who achieve a minimum of 60% on Part 1 and 80% on Part 2, while the CxA+BE is awarded to those who achieve a minimum of 80% on Part 1 and 60% on Part 2. If a person scores 80% or higher on both parts, they are awarded both designations. The BECxP and CxA+BE will be valid for five years. At the end of five years, the certificate(s) can be renewed. Details on the renewal process are included later in this document.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one’s name shall be noted by: BECxP or CxA+BE.

**Requirements:**

- Completion of the approved Commissioning Process building enclosure education
- Successful completion of the UW–Madison Building Enclosure CxP examination
Descriptions of Certifications for Educational Achievement
Plus Documented Experience

An applicant’s previous project experience in implementing the Commissioning Process, as demonstrated through the submitted application package, determines which certification will be awarded. There is no secondary exam for the documented experience certifications. Individuals may opt to pursue more than one documented experience certification by submitting separate applications showing the appropriate project experience for each. See the Application Instructions document for detailed requirements of each documented experience certification.

Accredited Commissioning Process Authority Professional (CxAP℠), (CAP℠)

Purpose:

The purpose of this certification is to recognize Commissioning Authorities (the CxP team leader) with a demonstrated level of knowledge, experience and success in implementing the full Commissioning Process. This includes the Commissioning Process team leader as designated by titles other than commissioning authority, which may be used by some organizations. The CxAP designation is meant to recognize individuals who have led the Commissioning Process from pre-design through the first year of occupancy, which normally includes developing a lifetime CxP plan for the facility. This can include both employees of the project owner and contract service providers.

Description:

Those obtaining the CxAP certification are Commissioning Process providers that have shown they can successfully implement the requirements of the full Commissioning Process from project inception through first year of occupancy. The application requires submission of two projects if one of the projects has a construction cost of $4 million or greater for new construction, or CxP fees/costs greater than $50,000 for at least one existing building project. Otherwise, four projects must be submitted where CxP fees/costs were at least $20,000 per project. To qualify for CxAP, the candidate’s application materials must show that he or she served in the role of the primary commissioning authority or commissioning team leader during all phases (pre-design through occupancy for new construction) on at least one of the projects. The applicant must provide documentation that will demonstrate a reasonable level of confidence by the review committee that the person receiving the designation as a CxAP will be able to bring high value to their employer or clients on all projects using the Commissioning Process. The applicant must also submit letters of reference by project owners on each project. Note: ASHRAE Guidelines 0.2P and 1.2P, when complete, should be used as the guideline methods for commissioning existing buildings.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one’s name shall be noted by: CxAP or CAP.

Requirements for CxAP:

☑ Current status as Qualified Commissioning Process Provider (QCxP℠)
☑ Successfully submit documentation on two or four projects per application requirements, including letters of reference by project owners
Accredited **Commissioning Process Manager** (CxM℠), (CXM℠)

**Purpose:**

The purpose of the CxM certification is to recognize individuals who have successfully managed the Commissioning Process for a project owner. The CxM designation will be awarded to those applicants who have shown they have managed the Commissioning Process activities either as an owner’s in-house Commissioning Process manager, or equivalent title, or as a third-party provider of these management services for an owner.

**Description:**

Those with the CxM certification will be able to effectively set requirements for the owner’s commissioning efforts or for solicitation of third-party commissioning authorities to provide high value and cost savings for their projects, employer’s projects, or contractually managed projects. They will be able to effectively manage, organize, and integrate the Commissioning Process into all new construction, rehab, existing building evaluations, and retro-commissioning projects. They will have a sound understanding of the requirements, benefits, and implementation of the Commissioning Process. Individuals representing governments or utilities that provide funding and management for commissioning projects are eligible for CxM. The application requires submission of two projects if one of the projects has a construction cost of $4 million or greater. Otherwise, four projects must be submitted where CxP fees/costs were at least $20,000. Applicants for CxM must provide documentation that the commissioning authority on their projects was involved from project inception through one year of occupancy on at least one of the submitted projects. The Commissioning Authority on each project must be listed in the application. The Commissioning Process applied to existing buildings may be substituted for two new construction projects, as long as at least one project has CxP fees/costs greater than $50,000. Otherwise, the applicant should provide documentation on four existing building projects where CxP fees/costs were greater than $20,000. The applicant must also submit letters of reference by project owners on each project. Note: ASHRAE Guidelines 0.2P and 1.2P, when complete, should be used as the guideline methods for commissioning existing buildings.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one’s name shall be noted by: CXM or CxM.

**Requirements:**

- Current status as Qualified Commissioning Process Provider (QCxP℠)
- Successfully submit documentation on two or four projects per application requirements, including letters of reference by project owners
Accredited **Commissioning Process Technical Service Provider (CxTS\textsuperscript{SM}), (CTS\textsuperscript{SM})**

**Purpose:**

The purpose of the CxTS certification is to identify those individuals who contribute significantly to the successful implementation of the Commissioning Process in a role other than as a lead commissioning authority or manager of the Commissioning Process program. In addition, the CxTS designation highlights the accomplishments of individuals who demonstrate success in Commissioning Process projects where they served as primary commissioning authority or provided assistance during some, but not all, phases of the process.

**Description:**

Those obtaining the CxTS certification understand the full Commissioning Process and provide support in a wide range of Commissioning Process activities. This may include performing Commissioning Process tasks in some phases of a project that implements the complete CxP, activities not typically performed directly by a CxAP or CxM, or implementation of the Commissioning Process on a large number of small new or existing building projects. Examples include, but are not limited to: (1) providing essential portions of the Commissioning Process on small projects, in-house projects, or energy commissioning projects, (2) serving to support or assist either a CxAP or CxM, (3) providing Commissioning Process tools or software, and (4) involvement in specific aspects or phases of the full Commissioning Process, such as functional performance testing, commissioning construction management, checklist creation and/or field verification, programming, or design verification. The application requires submission of two projects if one of the projects has a construction cost of $4 million or greater. Otherwise, four projects must be submitted where CxP fees/costs were at least $20,000. The Commissioning Process applied to existing buildings may be substituted for two new construction projects, as long as at least one project has CxP fees/costs greater than $50,000. Otherwise, the applicant should provide documentation on four existing building projects where CxP fees/costs were greater than $20,000. The applicant must also submit letters of reference by project owners on each project. Note: ASHRAE Guidelines 0.2P and 1.2P, when complete, should be used as the guideline methods for commissioning existing buildings. Prior to 2009, the title of the CxTS designation was Commissioning Process Technical Support Provider; those holding the CxTS certification may opt to use the term “Support” or “Service”.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one’s name shall be noted by: CxTS or CTS.

**Requirements:**

- ✓ Current status as Qualified Commissioning Process Provider (QCxP\textsuperscript{SM})
- ✓ Successfully submit documentation on two or four projects per application requirements, including letters of reference by project owners
Accredited **Green Commissioning Process Provider (GCxP℠), (GCP℠)**

**Purpose:**

The purpose of this certification is to recognize those who lead the commissioning process activities as commissioning authorities (the CxP team leader) on new or existing building projects that emphasize green and sustainable building principles. This includes the Commissioning Process team leader as designated by titles other than commissioning authority, which may be used by some organizations.

**Description:**

The GCxP designation recognizes individuals with knowledge, experience, and success in implementing the principles of the Commissioning Process. This designation is specifically applicable to those who have been the designated commissioning authority on LEED® new construction and major rehab or existing building projects, and also applies to Green Globes and other rating systems for sustainable construction. Projects that have sustainable emphasis, but are not rated, and achieve an equivalent or greater level of Commissioning Process activities can be submitted. The person eligible for this designation can include both employees of the project owner and third-party providers.

To obtain the GCxP certification, commissioning process providers must show they have successfully implemented the commissioning process on two or four green building projects where CxP fees/costs were at least $20,000. To qualify for GCxP, the candidate’s application materials **must** show that he or she served in the role of the primary commissioning authority or commissioning team leader. For LEED BD+C projects (New Construction, Core & Shell, etc.), two projects must achieve the Enhanced Commissioning credit. If the applicant has achieved the Enhanced Commissioning credit on two projects, only these two projects need to be submitted (instead of four). For LEED EB O&M projects, two projects must achieve all commissioning points. If the applicant has achieved all commissioning points on two EB projects, only these two projects need to be submitted (instead of four). For all other projects, the combination of the four projects must show that the applicant is able to lead commissioning process activities comparable to the level of rigor of the LEED commissioning prerequisite and credits.

The designation after or below (recommended for those with PE, RA or other professional designations after their name) one’s name shall be noted by: GCxP or GCP.

**Requirements:**

- Current status as Qualified Commissioning Process Provider (QCxP℠)
- Successfully submit documentation on four green building new construction or major rehab projects or existing building projects, including letters of reference by project owners (or two projects that achieve either all LEED Enhanced Commissioning or all LEED EB commissioning points)
Limitations of Certifications

These certifications only indicate that the person has met the minimum requirements as set forth by UW–Madison, based upon review of material submitted, completion of educational requirements, and grading of an examination. None of these measures provide a definitive means of predicting an individual’s actual performance of the Commissioning Process. The certifications do not imply a guaranteed level of competency, proficiency, knowledge, or ability to communicate or to successfully carry out various aspects of CxP practice. It is similar to an educational degree or diploma, in that actual implementation on a specific project has many variables that may not be reflected in prior demonstration of experience, education or examination.

Application Information

Important Notes:

1. There is no application form for the QCxP, BECxP, or CxA+BE.
2. No applications for CxAP, CxM, CxTS, or GCxP will be accepted until the applicant has earned the QCxP.
3. The QCxP status must be active (not expired) at the time of application submission.
4. There is one online application for the CxAP, CxM, CxTS, and GCxP certifications.
5. It will be the EPD Certification Committee’s option to offer the applicant the certification that meets the applicant's demonstrated qualification and experience.

The applicant may indicate which certification they are requesting. For example, if the applicant applies for the CxAP certification but does not fully meet the requirements of that certification, the committee may issue a different certification, based upon information provided to support the application. As an individual’s professional Commissioning Process experience changes, he or she may submit another application at a later date. After receiving a certification, an applicant may also choose to apply for one or more of the other documented experience certifications if desired.

Detailed instructions and guidance on preparing an application for CxAP, CxM, CxTS, and/or GCxP are contained in a separate “Application Instructions” file available for download at [http://cx.engr.wisc.edu](http://cx.engr.wisc.edu). The file contains the detailed submission requirements for each certification, along with guidance on choosing projects for the application.
**Recertification/Renewal Procedure for All Certifications**

All University of Wisconsin–Madison Commissioning certifications are valid for a period of five years. This includes any certificates issued under previous policies showing shorter timeframes. The purpose of expiration dates is to provide a process to ensure that individuals holding UW–Madison Commissioning certifications are remaining actively engaged and knowledgeable about the current application of the Commissioning Process.

Re-certification letters will be sent during January for any individual whose certificate expires during that calendar year. For example, forms will be sent in January 2014 for any certificate that expires before December 31, 2014. The re-certification process includes a survey and short online multiple-choice quiz. See the Fee Summary Table in this document for the current renewal fee. Once renewed, the certificate is valid until five years beyond December 31 of the original expiration year. For example, if a certificate expires in August 2014 and is renewed during 2014, a new certificate will be issued with an expiration date of December 31, 2019. An individual may opt to allow their certificate to expire by not responding to the letter by the deadline indicated.

**Please note:** EPD uses the last known contact information of the certificate holder when sending re-certification letters. Any certificate holder who would like to update his or her address for re-certification purposes should contact Mary Danielson (contact info shown on cover page) prior to January 1st of the year the certificate expires to ensure timely receipt of the letter. Mailing addresses can be updated at any time, but may delay the letter if received after January 1st of the expiration year.

The re-certification process requires 4 steps. These are shown on the re-certification letter and summarized below:

1. Log into the renewal website shown on the letter
2. Pay the renewal fee (if required – see fee schedule)
3. Update your contact information and complete the online survey
4. Complete the online Re-certification educational quiz (17 multiple-choice questions)

After these steps are complete, a new certificate with the updated expiration date will be sent to the updated mailing address indicated.

**Re-certification After Expiration**

After expiration, the QCxP, BECxP, and CxA+BE certifications can be renewed by retaking the examination. Examination fees will apply according to the fee schedule below. The CxAP, CxM, CxTS, or GCxP certifications cannot be renewed after expiring.
Fee Schedule

The fee schedule below begins February 1, 2014. Prior published fees will be honored until January 31, 2014. Fees are subject to change.

- Orientation/Review Session, Study Guide, and Examination (All applicants): $775
- First Renewal Fee for QCxP, BECxP, and CxA+BE Certificates: $0*
  (*Note: Anyone who paid a renewal fee prior to 1/31/14 will pay $0 for their next renewal of any certificate)
- Second (third, and beyond) Renewal Fee for QCxP, BECxP, and CxA+BE Certificates: $195
- Application Fee for CxAP, CxM, CxTS, or GCxP certification: $0
- Application Fee for Each Additional Certification: $195 each
- Renewal Fee for CxAP, CxM, CxTS, and GCxP Certificates: $195

The fee structure is summarized in the following table.

<table>
<thead>
<tr>
<th>Fee Summary Table</th>
<th>Examination</th>
<th>Apply for CxAP, CxM, CxTS, or GCxP</th>
<th>First Renewal (five years after award)</th>
<th>Ongoing Renewals (second, third, and beyond)</th>
</tr>
</thead>
<tbody>
<tr>
<td>QCxP</td>
<td>$775</td>
<td>$0 ($195 per each additional certification)</td>
<td>$0</td>
<td>$195</td>
</tr>
<tr>
<td>BECxP</td>
<td>$775</td>
<td>Not Applicable</td>
<td>$0</td>
<td>$195</td>
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<tr>
<td>CxA+BE</td>
<td>$775</td>
<td>Not Applicable</td>
<td>$195 per certification</td>
<td>$195 per certification</td>
</tr>
<tr>
<td>CxAP</td>
<td>Not Applicable (must achieve QCxP first)</td>
<td>Not Applicable</td>
<td>$195 per certification</td>
<td>$195 per certification</td>
</tr>
</tbody>
</table>
Contact Information

These certifications are administered and managed by the Department of Engineering Professional Development (EPD) in the College of Engineering at the University of Wisconsin–Madison.

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Index of Abbreviations

ASHRAE – American Society of Heating, Refrigerating, and Air-Conditioning Engineers

BECxP SM – Building Enclosure Commissioning Process Provider

BCA – Building Commissioning Association

Cx – commissioning

CxA – Commissioning Authority (some use Agent)

CxA+BE SM – Commissioning Authority + Building Enclosure

CxAP SM – Accredited Commissioning Process Authority Professional (also CAP SM)

CxM SM – Accredited Commissioning Process Manager

CxTS SM – Accredited Commissioning Process Technical Support Provider (also CTS SM)

CxP – Accredited Commissioning Process

CxPlan – Commissioning Process Plan

CxR – Commissioning Process Report

EBCxP – Existing Building Commissioning Process

EPD – Department of Engineering Professional Development, UW – Madison

GCxP SM – Accredited Green Commissioning Process Provider (also GCP SM)

NCBC – National Conference on Building Commissioning

NIBS – National Institute of Building Science

QxCP SM – Qualified Commissioning Process Provider (also QCP SM)