







# **CBECXP HANDBOOK**

# CERTIFIED BUILDING ENCLOSURE COMMISSIONING PROVIDER (CBECxP)

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# INTRODUCTION

### Dear CBECxP Applicant:

The Certified Building Enclosure Commissioning Provider (CBECxP) credential is offered by the International Institute for Building Enclosure Consultants (IIBEC). A building enclosure commissioning provider is an individual who may have direct advisory contact with owners, design professionals, contractors, installers, inspectors/auditors, or other persons seeking guidance on building enclosure design and construction. Often, persons responsible for building enclosure commissioning are architects, engineers, or construction managers.

The governance body for the IIBEC Certification Program, including the CBECxP, is the IIBEC Certification Council (ICC). The ICC is a balanced group of stakeholders (volunteers) representing various sectors within the building enclosure commissioning community, including individuals holding one or more professional licenses issued by a state jurisdiction or industry-related credentials issued by a variety of organizations. IIBEC manages conflicts of interest and understands the importance of impartiality and objectivity in the conduct of certification activities.

To become a Certified Building Enclosure Commissioning Provider (CBECxP) and per the certification scheme, an applicant must meet specific requirements including verifiable experience and education, as well as a passing score on the CBECxP exam. Details regarding these requirements are contained in this document. Membership in IIBEC is not required for certification. For the certified person, the value of the CBECxP credential can be found in enhanced career/professional development opportunities, demonstrated knowledge mastery, and greater recognition in the building enclosure commissioning industry. To maintain certification as a CBECxP, recertification must occur annually in accordance with an individual's certification expiration date. Details for recertification are contained in this document.

All applicants are encouraged to use the online process at iibec.org to complete the CBECxP application and annual recertification requirements.

IIBEC's receipt of a complete CBECxP application qualifies an applicant for exam eligibility. Once eligible, the candidate will be emailed by IIBEC's testing vendor to schedule the online exam for either in-person testing at a test center or remote testing using the applicant's computer. Candidates who do not pass an exam will have the option to re-test every four (4) months. Payment of the exam fee is required for each exam attempt. An applicant has (2) years from the date the complete application is approved by IIBEC to obtain a passing score on the exam. If a passing exam score has not been obtained by the close of the two (2) year deadline, the application expires, and all application materials are destroyed. Upon expiration, an applicant may re-apply at any time by filing a new application, paying the application fee, and submitting all required documentation.

IIBEC thanks you for your interest and looks forward to receiving your application for the CBECxP credential.

# CBECXP CERTIFICATION SCHEME, INCLUDING CERTIFICATION SCOPE

For this certification, the certification scheme encompasses the following elements:

Certification scope - "A CBECxP acts as the technical and administrative director of the building enclosure commissioning process that extends from the pre-design stage to the occupancy & operations stage."

Job tasks descriptions - a job task analysis was completed by IIBEC in collaboration with certification advisors whereby tasks related to the building enclosure commissioning role were identified.

Required competency - a high school diploma or general equivalency diploma (GED); four (4) years of employment experience in building enclosure commissioning; and ten (10) completed projects involving building enclosure commissioning.

Prerequisites - see "application requirements" section of this Handbook

Code of conduct - certified individuals are expected to adhere to the IIBEC Code of Ethics

For this certification, the certification scheme also includes:

\*Criteria for certification and recertification as detailed in the application for certification and the application for recertification.

\*Assessment of knowledge, via multiple-choice exam; assessment of building enclosure commissioning employment experience; assessment of building enclosure commissioning project experience.(Note: no exam is administered for recertification; completion of twelve (12) building enclosure commissioning-related continuing education hours (CEH) in the twelve (12) months preceding submission of the recertification application is mandated; assessment of the CEH is achieved through verification information supplied by the recertifying individual.)

\*Suspension or withdrawal of certification for just cause; such action can be related to a code of conduct violation, the suspension or termination of a professional license related to the practice of building enclosure commissioning arising from a third-party disciplinary action, or a criminal conviction in a court of law.

### **Code of Conduct**

The IIBEC Code of Ethics is recognized as the code of conduct for the IIBEC Certification Program.

### Introduction

The International Institute of Building Enclosure Consultants (IIBEC) is dedicated to the highest standards of professionalism, integrity, and competence. The standards contained in this Code of Ethics (Code) are statements of ethical principles by which the professional conduct and obligations of all IIBEC members and registrants shall be guided.

Under the IIBEC Bylaws, all IIBEC members and registrants are required to comply with the Code of Ethics and to report any observed violations. Adherence to this Code must be above reproach and beyond the influence of competing interests. Even the appearance of a conflict of interest shall be avoided.

The standards contained in this Code of Ethics are statements of ethical principles having broad

applicability to members and registrants of IIBEC. Members and registrants of IIBEC shall recognize that their profession and their practice may be governed by various laws (federal, state, provincial, local, or otherwise) and regulations regarding professional registration and the conduct of trade. It is their responsibility, therefore, to be familiar with those laws and regulations and to conduct themselves accordingly.

### Standard of Care Statement

This Code is not intended to define the Standard of Care a member or registrant is required to meet and shall not be used as a reference or part of a civil action against a member or registrant.

# **General Obligations**

Members and registrants shall maintain and further their knowledge of the profession in which they practice and shall maintain the utmost standard of professional judgment and conduct. Members and registrants shall conduct themselves and their practice honestly and impartially, serving with integrity the organization (I/BEG), other members, their clients, employers, and the public.

IIBEC does not tolerate harassment, discrimination, racism, violence, retaliation, and other disrespectful or inappropriate behavior. Members and registrants shall conduct themselves with integrity, in a professional manner and treat everyone with respect and dignity, including those with differences including but not limited to gender, gender identity, race, color, age, disability, sexual orientation, ethnic origin, veteran status, religion, or other legally protected characteristics.

IIBEC members and registrants are committed to diversity and inclusion and shall value and embrace diversity in the profession and participation in IIBEC programs and activities.

### **Fundamental Canons**

Members and registrants of IIBEC, in the performance of their duties, shall:

- -Hold paramount the safety, health, and welfare of the public.
- -Conduct themselves in a professional and respectful manner and recognize the contributions of the project team engaged in consulting, design, and construction.
- -Value, and treat with respect and dignity all individuals, regardless of gender, gender identity, race, color, age, disability, sexual orientation, ethnic origin, veteran status, religion, or other legally protected characteristics.

# Rules of Practice

Safety, Health, and Welfare of Public Responsibilities:

- -Adhere to applicable laws and regulations.
- -When necessary, rely on the advice of other competent and qualified persons as to the intent and meaning of such applicable laws and regulations.
- -Be honest in conduct, and promote effective use of resources through transparent, and impartial service with fidelity to the public, employers, associates, and clients.

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- -Approve and/or issue only those documents that they prepare or review and that are determined to be safe for public health and welfare, in conformity with accepted industry standards and applicable laws.
- -Neither offer to nor make payments or gifts to public officials, private clients, or industry representatives with the intent of influencing that person's judgment or decision in connection with an existing or prospective project in which the member/registrant is interested.
- -Do not mislead about the results that can be achieved through the use of the members' or registrants' services or products, nor shall the members or registrants state that they can achieve results by means that violate applicable laws.
- -If a member's or registrant's judgment is overruled under circumstances that, in the opinion and best professional judgment of the member or registrant, may endanger life, may cause substantial damage to property, or is not compliant with applicable laws and regulations, the member or registrant shall:
  - -Advise an employer and/or client about the decision,
  - -Refuse to consent to the decision, and
  - -Notify the appropriate Authority Having Jurisdiction charged with the enforcement of the applicable laws or regulations.

# Professional Responsibility:

- f) Be respectful and considerate to others in obtaining work and employment, and while participating in IIBEC events.
- g) Exercise unprejudiced and unbiased judgment and conduct when performing Services.
- h) Make accurate, truthful, and appropriate statements or claims about their qualifications, experiences, or performance.
- i) Perform services in areas of professional and personal competence.
- j) Undertake assignments only when qualified by education and experience in the specific technical fields involved.
- f) Further knowledge of technical and non-technical capabilities including, but not limited to, the science, principles, and ethics of the profession and community.
- g) Evaluate and decline activity or employment, financial or other interest, and refuse contribution if it reasonably appears that such involvement could compromise judgment and the best interests of the clients or employers. Provide full disclosure to the client or employer and obtain consent thereto.
- h) Restrict the use of their names or firms nor associate in business ventures with persons or firms that they have reason to believe are engaged in fraudulent or dishonest business or professional practices.
- q) Similar to statement c. above, engage only in accurate, appropriate, and truthful promotion of their practice.
- r) Be objective and truthful in reports, statements, testimony, and on social media.

- s) Maintain client and employer confidentiality when applicable.
- t) Comply with obligations relating to confidential information and applicable data privacy laws in relation to its use, processing, and storage of professional and personal data.
- Refrain from making false statements about the work of others and shall not maliciously injure or attempt to injure the prospects, practice, or employment position of others.
- v) Develop and disseminate accurate information related to consultation, design, and construction of building enclosure systems.
- w) Do not accept compensation financial or otherwise from more than one party for services on the same project, or for services pertaining to the same project, unless the circumstances are fully disclosed.
- x) Members and registrants having substantial information leading to a reasonable belief that another member or registrant has committed a violation of this Code that raises a serious question as to the honesty, trustworthiness, or fitness of the other member or registrant are encouraged to initiate a complaint with the IIBEC Ethics Committee and/or applicable Authority Having Jurisdiction.

### **Enforcement and Amendment**

Enforcement of the Code of Ethics is administered through the IIBEC Ethics Committee, appointed by the IIBEC Board of Directors, and the Board of Directors as set forth in the IIBEC Ethics Administrative Procedures. The IIBEC Code of Ethics may be amended by the IIBEC Board of Directors upon a two-thirds vote of the Board. (End - IIBEC Code of Ethics.)

### **DISCLAIMER**

The International Institute of Building Enclosure Consultants (IIBEC) will continue to make the latest versions of public documents for the CBECxP certification available on the IIBEC website (iibec.org). It is the individual's responsibility to email CBECxP@iibec.org and/or check the IIBEC website when considering a CBECxP application, to ensure the most current documents, guidance, and information are utilized. CBECxP processes and procedures, including fees, are subject to change.

CBECxP documents, guidance, and information provided by IIBEC are made available on an "as is" basis without provision of warranties of any kind whether expressed or implied. IIBEC and its officers, directors, agents, authorized representatives, and affiliates specifically disclaim and deny, to the fullest extent by law, any and all liability and/or responsibility for any claims, actions, liabilities, losses, damages, expenses, or injuries of any kind or nature, (including without limitation, direct, indirect, incidental, consequential, special, exemplary, or lost profits) arising directly or indirectly or resulting from the use of or reliance upon such documents or information provided by this Handbook, in general or specifically.

The practice and profession of building enclosure commissioning may be governed by various local, regional, state, provincial, or federal laws, regulations, and ordinances regarding professional registration, business practices, and the conduct of trade. Each CBECxP candidate should be familiar with applicable laws, regulations, and ordinances and conduct business accordingly. IIBEC currently has no local, state, provincial, or federal jurisdiction, sanction, or authority. While IIBEC is based in the U.S., it welcomes applicants from international locations. However, applicants are advised that many of the industry best practices materials upon which the exam is based were developed in the U.S.

Note: Prospective CBECxP applicants, including those who are recertifying, are hereby notified that IIBEC plans to apply for third-party accreditation for its CBECxP credential. Therefore, CBECxP requirements, procedures, and/or processes, including those for applicants pursuing certification or recertification, may be modified to achieve accreditation. Those modifications may render the current non-accredited CBECxP credential granted to individuals as transient and time-limited; IIBEC will notify certified persons holding the CBECxP credential, as well as persons with pending applications for CBECxP certification or recertification of material changes.

### ADA SPECIAL NEEDS MODIFICATION REQUESTS

IIBEC complies with the requirements of The Americans with Disabilities Act (ADA). Individuals requiring special needs modification(s) for completion of any application-related activity, including the CBECxP exam, should contact the IIBEC Certification Program Staff: 434 Fayetteville Street, Suite 2400, Raleigh, NC 27601, CBECxP@iibec.org, (800) 828-1902. A completed form containing all required signatures is needed; that form is available in this *Handbook*.

### **APPEALS**

All appeals related to the IIBEC Certification Program, including reconsideration of adverse decisions, are received by the IIBEC Certification Council (ICC). The appeal handling process shall be included in the application form for certification and recertification; a blank appeals form shall be included as part of the application form, also. Individuals submitting an appeal should use the appeal form.

Appeals shall be submitted via email to the ICC at CBECxP@iibec.org. Within thirty (30) days of IIBEC's receipt of the complete appeal form **and** the \$(US)50 appeal fee payment, confirmation shall be emailed to the appellant. Progress notices shall be emailed to the appellant, as available. A final, binding determination shall be emailed to the submitter within ninety (90) days of IIBEC's receipt of the complete appeal form **and** appeal fee payment, unless an alternative timeframe for resolving the appeal is agreed upon by both the appellant and IIBEC. The final decision shall be made by an IIBEC designee who was not involved in the decision being appealed; the ICC and/or its appointee shall provide that designee with applicable records and other required documentation to enable a fair,

impartial, and non-discriminatory final appeal determination.

Appeals shall be considered confidential. Appeals shall be tracked and recorded in writing, including steps taken to resolve appeals, so that appropriate corrective actions and/or corrections can be undertaken. The appeals form is in this *Handbook*.

#### **COMPLAINTS**

Complaints shall be related to the IIBEC Certification Program; complaints are confirmed by the IIBEC Certification Council (ICC) to be related to certification activities for which IIBEC is responsible. If a complaint is unrelated to such activities, the complainant will be informed so the complaint may be redirected, if possible, to the most appropriate IIBEC designee. The complaint handling process shall be included in the application form for certification and recertification; a blank complaint form shall be included as part of the application form, also. Individuals submitting a complaint should use the complaint form.

Complaints shall be submitted via email to the ICC at CBECxP@iibec.org. Within thirty (30) days of IIBEC's receipt of the complete complaint form, confirmation shall be emailed to the complainant. Progress notices shall be emailed to the complainant, if applicable. A complaint involving a certified person shall require notification to that certified individual at the appropriate time. A final, binding determination shall be emailed to the complainant within ninety (90) days of IIBEC's receipt of the complete complaint form. The final decision shall be made by an IIBEC designee who was not involved in the subject of the complaint; the ICC and/or its appointee shall provide the designee with applicable records and other required documentation to enable a fair, impartial, and non-discriminatory final determination regarding the complaint.

Complaints shall be considered confidential. Complaints shall be tracked and recorded in writing, including steps taken to resolve complaints, so that appropriate corrective actions and/or corrections can be undertaken. The complaint form is in this *Handbook*.

### CONFLICT OF INTEREST, FAIRNESS, AND NON-DISCRIMINATION

IIBEC recognizes the importance of avoiding conflict of interest in business matters. IIBEC defines conflict of interest as any activity or employment having any significant financial benefit or other interest, or acceptance of any contribution if it would reasonably appear that such activity, employment, interest, or contribution could compromise professional and objective judgment as a building enclosure commissioning provider or prevent the provider from serving the best interest of his/her client. Also, IIBEC is committed to fairness and non- discrimination in the conduct of the Certification Program; concerns involving these matters may be submitted in writing via email to the IIBEC Certification Council at CBECxP@iibec.org.

### **IIBEC IMPARTIALITY STATEMENT**

The International Institute of Building Enclosure Consultants (IIBEC) and its management are committed to ensuring that all certification activities are conducted impartially, objectively, and fairly. IIBEC applies its policies, procedures, and decisions consistently to all individuals seeking certification. The IIBEC Certification Council (ICC) provides independent oversight of the CBECxP certification program and is responsible for ensuring that certification decisions are made impartially and based solely on objective evidence.

IIBEC actively identifies and manages potential conflicts of interest to ensure that its certification processes and decisions remain free from undue influence or external pressure. A clear separation is maintained between 11BEC's certification activities and its other organizational functions, including education and training. All certification decisions are made independently and are based solely on established criteria and verifiable evidence, without bias, favoritism, or prejudice.

Participation in IIBEC educational offerings, including training, is not required for certification and does not provide a special advantage to the applicant at any stage of the certification process. Additionally,

participation in such offerings does not guarantee successful performance on any examination.

# **CERTIFICATION, APPLICATION SUMMARY**

To achieve the CBECxP credential, IIBEC membership is not required. The successful applicant must:

- 1 Meet all application requirements and provide supporting documentation.
- 2 Submit the notarized affidavit.
- 3 Attain one hundred (100) points from education, projects, licenses, and other credentials.
- 4 Sign and submit the application; pay the application fee.
- 5 Pay the exam fee, take the exam, and obtain a passing score.

# RECERTIFICATION, APPLICATION SUMMARY

To maintain the CBECxP credential, IIBEC membership is not required. The successful recertification applicant must:

- 1 Meet all requirements, including the continuing education requirement; provide supporting documentation.
- 2 Sign and submit the recertification application; pay the recertification application fee(s).

### CERTIFICATION, APPLICATION REQUIREMENTS

# **Application Form**

The initial certification application form must be completed and signed; it is contained in this *Handbook*. Upon submission, an applicant has up to one (1) year to provide all materials per the application. If all materials are not received by IIBEC by the one (1) year deadline, the application expires, and all application materials are destroyed. Upon expiration, an applicant may re-apply at any time by filing a new application, paying the application fee, and submitting all required documentation.

### **Education Requirement**

A digital photo (JPEG, PDF, or GIF) of the High School Diploma/General Equivalency Diploma (GED) or college/university degree(s) if applicable, is required. Contact CBECxP@iibec.org to determine an appropriate verification document if a diploma is unavailable or if the applicant claims college/university credits without completion of a degree.

The applicant's education background must be detailed in the application. Note: The applicant must submit education verification documentation for the CBECxP application regardless of documents previously submitted by the applicant to IIBEC or other organizations for attainment of other credentials or for any other purposes. For a CBECxP application to be considered complete, supporting documentation must be provided by the applicant specifically for the CBECxP application process.

# **Employment Experience Requirement**

The applicant must have at least four (4) years of building enclosure commissioning employment experience. Information regarding an applicant's employment history is required. See Attachment Sheet 1 - Employment

History Form.

# **Project Experience Requirement**

A minimum of ten (10) projects from three (3) separate building enclosure commissioning project experience categories is required. These categories are listed in Supplement Sheet A; Descriptions of Project Experience Categories. A contact name and phone number must be provided for each project listed on Attachment Sheet 2 - Project Experience Form.

# **Continuing Education Hour (CEH) Requirements**

Completion of a minimum of three (3) building enclosure commissioning-related CEH activities is required and complete verification documentation must be provided. CEH must be technical in nature and not sales or product oriented. Online CEH programs are acceptable. CEH verification documentation should be in the form of a certificate or letter from the sponsoring organization stating the name of the individual, the name of the CEH activity and sponsoring organization, the date of the activity, and the number of hours awarded. A minimum of seventy (70) CEHs is required. CEHs can be no older than ten (10) years.

### **Point System Explanation**

A total of one hundred (100) points must be tallied from Education, Project Experience, and Professional Licenses/Credentials.

## The following points apply for **Education**:

```
High School Diploma or General Equivalency Diploma (GED) = zero (0)

points. Associate= twenty (20) points, industry-related*; sixteen (16) points,
general.

Four-Year Bachelor= forty (40) points, industry-related*; thirty-two (32) points,
general. Five-Year Bachelor= fifty (50) points, industry-related*; forty (40) points,
general.

Master= ten (10) points, industry-related*; eight (8) points, general.

Doctorate = ten (10) points, industry-related*; eight (8) points, general.

Each year of college/university completion, without degree= ten (10) points, industry-related*; eight (8) points, general.

(*Industry-related = architecture, engineering, construction, building science, or building technology.)

The maximum total number of points that may be awarded for Education is fifty (50)

points. [For Applicant Use: My Education Points = ______
```

# The following points apply for **Project Experience**:

For each project, one (1) point is awarded in specified project experience categories related to building enclosure commissioning. A list of categories is found in Supplement Sheet A - Description of Project Experience Categories. Points may be earned from multiple categories for

a single project.

For example: on a single project, an applicant performed an infrared moisture survey (category #1); gave deposition for litigation (category #7); and wrote a building enclosure commissioning article which was published in a magazine (category #9). In this example, three (3) points are earned, with one (1) point attained for each project experience category: #1, #7, and #9.

The Project Experience Form - Attachment Sheet 2 must be completed with information for each project, including the name and phone number of a contact person. A minimum of ten (10) projects is required. The applicant may attach additional copies of the Project Experience Form, as needed.

[For Applicant Use: My Project Experience Points = \_\_\_\_\_

The following points apply for these **Professional Licenses**:

Twenty (20) points are awarded to licensed architects (RA) or licensed professional engineers (PE). Persons with dual licensure (RA and PE) or multiple licenses from various states or provinces receive a maximum of twenty (20) points. A digital photo (JPEG, PDF, or GIF) of each license for which points are claimed, with expiration date visible on each license, must be emailed to CBECxP@iibec.org.

[For Applicant Use: My Professional Licenses Points = \_\_\_\_\_

The following points apply for these **Professional Credentials**:

BECxP = five (5), CxA+BE = five (5), BCxP = five (5), CCP = five (5), BSSO = five (5), HERS = five (5), OBEC = five (5), CxA = five (5), CET = five (5), LEED AP = five (5), LEED BD+C = five (5), CDT = five (5), CCCA = five (5), CCS = five (5), CIT = five (5), CABS = five (5), RRO = five (5), REWO = five (5), RBEC = ten (10), RRC = ten (10), RWC = ten (10), REWC = ten (10).

[For Applicant Use: My Professional Credentials Points = \_\_\_\_\_

# **Calculating an Applicant's Total Points**

An applicant's total points are calculated by summing the points attained for each category: Education, Project Experience, and Professional Licenses/Credentials.

[For Applicant Use: My Total Points = \_\_\_\_\_

### Exam

Achievement of a passing score on the CBECxP exam is required for certification. Details regarding the exam are contained in the CBECxP Exam Guide in this *Handbook*.

### Fees, Certification Application

For any IIBEC Certification Program credential, all fees are non-refundable. See the payment form included in the certification application form in this *Handbook*.

### Maintenance of Certification

Once certified, individuals maintain certification by annually filing a recertification application, paying the recertification fee(s), and submitting application-related documentation to verify continuing education requirements. Further details and the recertification application form are contained in this *Handbook*.

### RECERTIFICATION, APPLICATION REQUIREMENTS

### **Application Form**

The recertification application form must be completed and signed; it is contained in this *Handbook*. Sixty (60) days prior to the certificant's date of certification expiration, IIBEC will provide a recertification notice via email and postal mail. To maintain certification, a recertification applicant has ninety (90) days from the date of certification expiration within which to complete the recertification process. A late fee shall be paid by an applicant who completes the recertification process subsequent to his/her certification expiration date. (See recertification application in this *Handbook*.)

## **Continuing Education Hours (CEH) Requirement**

For recertification, twelve (12) continuing education hours (CEH) completed within the preceding twelve (12) months prior to recertification application submittal, must be achieved. CEH verification documentation should be in the form of a certificate or letter from the sponsoring organization stating the name of the individual, the name of the CEH activity and sponsoring organization, the date of the activity, and the number of hours awarded.

# Fees, Recertification Application

For any IIBEC Certification Program, all fees are non-refundable. See the payment schedule included in the recertification application form in this *Handbook*.

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# APPLICATION FOR CBECxP CERTIFIED BUILDING ENCLOSURE COMMISSIONING



434 Fayetteville St., Suite 2400 Raleigh, NC 27601 (800) 828-1902 or (919) 859-0742

www.iibec.org

CBECxP@iibec.org

# Type or Print Legibly Using Black Ink

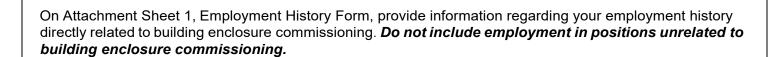
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Name	Last	First	Middle	
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•	nsed Professional Engi			
License Date:	State/Province:	License #:	Expiration:	
Americans Wi	th Disabilities Act Al	DA Special Needs M	odifications Request	
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( ) Distributor (	) Other, please specif	` ,	neering ( ) Contractor (	( ) Manufacturer
Employer Name	e/Street Address:			
City: Phone:	State/Pr	rovince: Zip	/Postal Code:	Country:
Employer Orga ( ) Other, pleas	nization Type: () Indive specify:	ridual ( ) Partnershi <sub>l</sub>	O () Corporation	

In chronological order, list the type, name, and address of each high school, college, university, or technical school attended. For college or university credit-bearing education for which no degree was conferred, indicate the number of semesters completed. This sheet may be photocopied if additional sheets are required.

Verification of CEH is required and consists of these components: a certificate or letter from the sponsoring organization stating the name of the individual, the name of the CEH activity and sponsoring organization, the date of the activity, and the number of hours awarded. Verification information can be entered via the applicant's online IIBEC profile account or emailed to CBECxP@iibec.org.

Type of	Name and	Dates	Did you	Semesters	Major	Degre
School	Address of Institution	Attended Month/ Year	Graduate?	Completed	-	



On Attachment Sheet 2, Project Experience Form, list entries for which building enclosure commissioning-related project experience is claimed. A minimum of ten (10) projects from three (3) project experience categories must be entered. A contact name and phone number must be included for each project. See Supplement Sheet A, Descriptions of Project Experience Categories.

The IIBEC Code of Ethics, available at https://iibec.org/membership/code-of-ethics/, outlines the obligations of the building enclosure commissioning provider to the public, the client, the employer, the profession, and the building industry. The CBECxP applicant must agree to promote and conform to this code of ethics. See the Affidavit in Section 8.

Complete Attachment Sheet 4 - Affidavit and submit the notarized document to IIBEC at CBECxP@iibec.org.



434 Fayetteville St., Suite 2400 Raleigh, NC 27601 (800) 828-1902 or (919) 859-0742 www.iibec.org

Pay by check or credit card: a complete and signed recertification application must also be submitted via the IIBEC online user portal, or as a PDF emailed to CBECxP@iibec.org.

If paying by check (\$US) payable to "IIBEC", mail to: 434 Fayetteville Street, Suite 2400, Raleigh, NC 27601.				
[ ] \$425.00 certification application fee.				
If paying by credit card via your online IIBEC profile	e account, select card type:			
Charge my: [ ] VISA [ ] MasterCard [ ] American E	xpress [ ] Discover			
[ ] \$425.00 certification application fee.				
Name on credit card	Telephone			
Account Number	Expiration Date			
3-Digit or 4-Digit Verification Value/CodeSignature	Date			
Credit card billing address: (If different from address provided	on CBECxP application)			
Address:				
City:State/Province:	Zip/Postal code:			
Country:				



434 Fayetteville St., Suite 2400 Raleigh, NC 27601 (800) 828-1902 or (919) 859-0742 www.iibec.org

### I hereby attest that:

I am submitting my application for the IIBEC Certified Building Enclosure Commissioning Provider (CBECxP) credential with the following scope: "a CBECxP acts as the technical and administrative director of the building enclosure commissioning process that extends from the pre-design stage to the occupancy & operations stage." I understand that certification is contingent upon satisfying all requirements and supplying application-related documentation for the CBECxP certification credential; if I do not submit all required application documentation within one (1) year of application submission, my application will expire.

In addition, I understand that I must take the CBECxP exam and obtain a passing score within two (2) years of my application approval by IIBEC or my application will expire. I agree to keep confidential and not disclose any CBECxP exam-related content without the approval of IIBEC.

Upon expiration of an application for any reason, all application materials will be destroyed by IIBEC. I may re-apply at any time by submitting a new application with required documentation and payment of the application fee.

I hereby subscribe to and agree to conform to the IIBEC Code of Ethics. I shall endeavor never to place myself in a conflict of interest or permit myself to be placed in a position that would allow for a potential conflict of interest. Conflict of interest shall be defined as any activity or employment having any significant financial benefit or other interest, or acceptance of any contribution if it would reasonably appear that such activity, employment, interest or contribution could compromise my professional and objective judgment as a building enclosure commissioning provider or prevent me from serving the best interest of my client.

I understand if CBECxP certification is granted, I shall agree to use of the CBECxP certificate and the CBECxP mark appropriately.

I understand if CBECxP certification is granted, my name, place of employment, the geographic location of my employer, and the date of my certification may be publicly disseminated in an IIBEC press release.

I understand that my name, certification status, and scope of certification shall be public information. Such information shall be made publicly available by IIBEC, upon request, except where the release of such information is prohibited by law.

Applicant Signature	Date
Applicant Name (Printed)	

Thank you! Each applicant is encouraged to retain a copy of the competed application.

# **RECERTIFICATION APPLICATION - CBECxP**

#### CERTIFIED BUILDING ENCLOSURE COMMISSIONING PROVIDER



434 Fayetteville St., Suite 2400 Raleigh, NC 27601 (800) 828-1902 or (919) 859-0742 www.iibec.org Date

Applicant	Last	First	Middle		
Name					
Home	Number and Stree	et:			
поше	City:	State/Province:	Zip/Postal Code:	Country:	
Address	Email:	Pho	one:		
Employer (Nam	ne of Organization):				
Employer Addro	ess:				
Employer Phon	e:				
Americans With Disabilities Act (ADA) Special Needs Modification(s) Request					
In connection with this application for recertification for the IIBEC CBECxP credential, do you require accommodations per the Americans with Disabilities Act (ADA)? ( ) Yes ( ) No					

For recertification, the applicant must provide verification of twelve (12) building enclosure commissioning-related continuing education hours (CEH) attained in the twelve (12) months prior to filing the recertification application. CEH must be technical in nature and not sales/product oriented. Verification of CEH is required and consists of these elements: a certificate or letter from the sponsoring organization stating the name of the individual, the name of the CEH activity and the sponsoring organization, the date of the activity, and the number of hours awarded. Verification information can be entered via the applicant's online IIBEC account or emailed to CBECxP@iibec.org.



434 Fayetteville St., Suite 2400 Raleigh, NC 27601 (800) 828-1902 or (919) 859-0742 www.iibec.org

# If paying by check (\$US) payable to "IIBEC":

434 Fayetteville Street, Suite 2400, Raleigh, NC 27601				
[ ] \$250.00 recertification application fee.				
[ ] \$150.00 additional recertification application LATE fee if submitted after certification expiration date, but within ninety (90) days of that date, i.e., during the grace period. (If more than ninety (90) days have elapsed since the certification expiration date, a new application for certification must be submitted and this form cannot be used.)				
If paying by credit card via your IIBEC online account, select card type:				
Charge my: [ ] VISA [ ] MasterCard ] American Express [ ] Discover				
[] \$250.00 recertification application fee.				
[ ] \$150.00 additional recertification application LATE fee if submitted after certification expiration date, but within ninety (90) days of that date, i.e., during the grace period. (If more than ninety (90) days have elapsed since the certification expiration date, a new application for certification must be submitted and this form cannot be used.)				
Name on credit card				
Account Number				
Expiration Date				
3-Digit or 4-Digit Verification Value/CodeSignature				
Date				
Credit card billing address: (If different from address provided on application)				
Address:				
City:State/Province:Zip/Postal code:				
Country:				



### I hereby attest that:

I am submitting my application for recertification for the IIBEC Certified Building Enclosure Commissioning Provider (CBECxP) credential with the following scope: "a CBECxP acts as the technical and administrative director of the building enclosure commissioning process that extends from the pre-design stage to the occupancy & operations stage." I understand that recertification is contingent upon satisfying all requirements and supplying application-related documentation for recertification for the CBECxP credential. Recertification for the CBECxP credential requires payment of fees and is contingent upon these conditions:

Twelve (12) continuing education hours (CEH) related to building enclosure commissioning must be completed within the preceding twelve (12) months of this recertification application's date of submission. CEH must be technical in nature and not sales/product oriented. CEH verification documentation consists of a certificate or letter from the sponsoring organization stating the name of the individual, the name of the CEH activity and the sponsoring organization, the date of the activity, and the number of hours awarded. Verification of the twelve (12) CEH is required. Verification information is emailed to CBECxP@iibec.org or entered via the applicant's online IIBEC profile account.

I hereby subscribe to and agree to conform to the IIBEC Code of Ethics. I shall endeavor never to place myself in a conflict of interest or permit myself to be placed in a position that would allow for a potential conflict of interest. Conflict of interest shall be defined as any activity or employment having any significant financial benefit or other interest, or acceptance of any contribution if it would reasonably appear that such activity, employment, interest or contribution could compromise my professional and objective judgment as a building enclosure commissioning provider or prevent me from serving the best interest of my client.

My CBECxP certification expires as of the expiration date on my CBECxP certificate. If I have not recertified by that expiration date, I will have ninety (90) days following my certification's expiration date, i.e., the grace period, to complete recertification. If I have not achieved recertification by the close of that grace period, I may certify as a CBECxP only through completion of the process for certification as a new applicant. I understand if/when CBECxP recertification is granted, I shall be required to sign an agreement for the use of the CBECxP certificate and the CBECxP mark.

I understand if CBECxP recertification is granted, my name, place of employment, the geographic location of my employer, and the date of my certification may be publicly disseminated in an IIBEC press release.

I understand that my name, certification status, and scope of certification shall be public information. Such information shall be made publicly available by IIBEC, upon request, except where the release of such information is prohibited by law.

Applicant Signature	_Date
Applicant Name (Printed)	_

Thank you! Each applicant is encouraged to retain a copy of the competed application.



# **EXAM GUIDE**

# Certified Building Enclosure Commissioning Provider (CBECxP)

# OVERVIEW - CERTIFIED BUILDING ENCLOSURE COMMISSIONING PROVIDER (CBECxP) EXAM

Applicants who have satisfied all application requirements including the submission of all supplementary documentation, become exam eligible. Each exam-eligible applicant will be emailed by the testing vendor to schedule a test session. Upon achieving exam eligibility, an applicant has two (2) years within which to take the exam and obtain a passing score. The test fee is \$(US)325. Candidates who do not initially pass the exam will have the option to re-test every four (4) months during the aforementioned two (2)-year timeframe. A test fee must be paid prior to each exam attempt.

If the two (2)-year timeframe has elapsed and a passing score has not been obtained by the applicant, the application will expire. All application materials will be destroyed by IIBEC and a new application, including payment of the application fee, will be required.

The CBECxP exam is online, and computer based. It is administered by a third-party test vendor, (Meazure Learning,) offering conveniently located test centers and live remotely proctored testing using the applicant's home or office computer. Conditions and requirements for in-center testing or remote testing including requiring a test-taker to sign a non-disclosure/confidentiality agreement, confirming a test-taker's identity prior to testing, test session proctoring procedures, identification of materials allowed and disallowed during a test session, and processes for monitoring cheating-related activities are communicated to test-takers by Meazure Learning. Cheating is never allowed. A test-taker who engages in cheating is subject to disciplinary action including cancellation of his/her CBECxP application.

The CBECxP exam addresses all phases of the building enclosure commissioning process (pre-design, design, bidding and negotiation, construction, and occupancy and operations). The CBECxP exam is a three (3)-hour test, consisting of ninety (90) multiple-choice items of which five (5) items are unscored and not incorporated into the candidate's final score. A list of reference publications used in the development of the exam, an outline of the exam objectives, and suggestions for exam preparedness are provided on the following pages.

### **Exam Rules & Expectations**

IIBEC partners with Meazure Learning to deliver its certification exams securely and fairly. IIBEC's exam rules and expectations, as outlined in this Handbook, are the authoritative requirements for all candidates. These rules take precedence over any vendor-supplied guidance.

For additional logistical and technical information about your exam session, candidates should carefully review the notifications they receive directly from Meazure Learning, including:

- Notice to Schedule (NTS) provides instructions for scheduling, eligibility period, and account access.
- Scheduling Confirmation Notice confirms your exam appointment details, admission requirements, and test center or remote proctoring procedures.
- Live Remote Proctoring (LRP) Confirmation provides technical requirements, system checks, and exam-day steps if testing remotely.

Candidates are responsible for reviewing and following the instructions in these notices in addition to the rules in this Handbook.

# **ADA Special Needs Modification Requests**

IIBEC complies with the requirements of The Americans with Disabilities Act (ADA). Individuals requiring special needs modification(s) for completion of any application-related activity, including the CBECxP exam, should contact the IIBEC Certification Program Staff: 434 Fayetteville Street, Suite 2400, Raleigh, NC 27601, CBECxP@iibec.org, (800) 828-1902. A completed form containing all required signatures is needed; that form is available in this *Handbook*.

### **Identification & Check-In**

You must have a current (non-expired), government-issued photo identification with signature (driver's license, immigration card, passport, U.S. passport card, state ID card, or military ID card). The first and last name on your identification must exactly match the name in your exam scheduling record; nicknames and mismatches will not be accepted. Candidates who fail to provide proper identification will be considered a no-show and will forfeit exam fees. Original documents are required.

Name-change documentation (e.g., marriage license, divorce decree, or court order) will not be accepted at the test site. Any updates to candidate records must be submitted to IIBEC and Meazure Learning at least one (1) week prior to your appointment.

Arrive or log in 15 minutes before your scheduled time to complete check-in. Remote candidates will complete a 360° room scan; the room must be private, free of distractions, and subject to proctor verification, including a 360° scan of the workspace and monitor using a reflective surface. On-site candidates must store belongings in lockers as directed.

### **Remote Proctoring & Recording**

For candidates testing remotely, all exam sessions are delivered through a locked-down browser and are continuously monitored by live proctors via audio and video. Before the exam begins, candidates must present a current (non-expired), government-issued photo identification with signature (see details above- Identification & Check-In), and complete a 360° room scan to verify that the workspace is free of unauthorized materials.

At the conclusion of the exam, candidates must remain connected until formally dismissed by the proctor. Disconnecting before dismissal may result in a report to IIBEC and Meazure Learning and could affect exam validity.

All remote exam sessions are recorded and securely retained by the exam vendor. IIBEC Staff conduct regular spot checks of recorded sessions to ensure compliance with exam rules and security protocols. Any security incidents identified during or after the exam will be investigated, and appropriate action will be taken, which may include invalidation of results or disciplinary measures. All remote sessions are recorded and securely retained. Recordings will be retained for up to one (1) year and reviewed by IIBEC and Meazure Learning for quality assurance and security purposes.

MAN-CERT-002

### **Exam Environment**

Testing is continuously monitored by audio, video, and live proctors.

For remote exams, live proctors monitor in real time, and your environment must remain private and interruption-free. Candidates must test on a compatible device with full administrative privileges. PC computers are recommended, though Macs are acceptable. Chromebooks, tablets, iPads, projectors, and dual or multiple monitors are not permitted. All unnecessary programs, including VPNs and remote access software, must be closed before the exam begins.

### **Breaks**

You may take one 10-minute restroom break during the exam. The exam timer will continue to run during the break, and you will need to complete a room scan upon returning to the computer, if testing remotely. No additional time will be added to the exam for time spent during the break or room scan.

Candidates requiring accommodated breaks must follow the ADA request process described in the ADA Special Needs Modification Requests section of this Handbook.

### **Prohibited Items**

The following are **strictly prohibited** in the testing area or during online exams:

- Cameras, cell phones, optical readers, or other electronic devices that include the ability to photograph, photocopy, or otherwise copy test materials.
- Notes, books, dictionaries, or language dictionaries (except as expressly permitted by the exam sponsor, see the Additional Examination Specific Information in your confirmation notice email if applicable).
- Bookbags or luggage.
- Purses or handbags.
- iPods, mp3 players, tablets, headphones, or pagers.
- Calculators, computers, PDAs, or other electronic devices with one or more memories.
- Personal writing utensils such as pencils, pens, and highlighters.
- Google and smart glasses (any glasses with electronics).
- Watches, smart devices, and other jewelry except wedding or engagement rings.
- Weapons
- Medicine, including cough drops (except as expressly permitted in advance),
- Food and beverages; and
- Coats and jackets.
- Hats, hoods, or other headwear are not permitted in the examination room unless required for religious purposes. All items are subject to inspection by the proctor if suspicious behavior is detected.
- Please note that sweaters and sweatshirts without pockets or hoods are permitted to be worn.
- Leaving the testing area for any reason other than the approved restroom break is prohibited and will result in exam termination.

### **Exam Conduct**

- You are strictly prohibited from retaining, copying, distributing, disclosing, discussing, possessing, or receiving any examination content, including even partial questions, by written, electronic, oral, or other form of communication.
- Unauthorized aids or assistance are prohibited.
- All candidates must sign the Candidate Attestation acknowledging understanding of these rules.
- Violations will be reported immediately to IIBEC and may result in exam invalidation and/or disciplinary action.
- Cheating is never allowed on any IIBEC Certification Program exam. Individuals engaging in any kind of cheating behavior or activity will be subject to disciplinary action by IIBEC.

# Confidentiality

Candidates agree to maintain the confidentiality of all examination content. Exam questions, in whole or in part, may not be copied, reproduced, shared, or disclosed in any form, either during or after the exam session.

# **Security of Exam Materials**

Exams are delivered through a secure, locked-down browser (remote) or locked-down workstation (test center). Content is encrypted, restricted to your exam session, and removed from the system immediately upon completion.

Proctors are trained to identify suspicious behavior and respond promptly. Any suspected breach will trigger incident documentation and possible remediation actions by IIBEC.

# **Candidate Agreement**

Before beginning the exam, candidates are required to complete an electronic attestation through Meazure Learning. By signing this attestation, candidates confirm that they have read and understood the rules in this Handbook, agree to abide by IIBEC's exam security protocols, and acknowledge that any violations may result in termination of the exam, invalidation of results, or other disciplinary action

### **Rescheduling & No-Shows**

Candidates must follow the scheduling, rescheduling, and cancellation policies outlined in their confirmation email from Meazure Learning. Failure to appear for a scheduled exam appointment without proper rescheduling will be considered a no-show, and exam fees will be forfeited.

# **Obtaining Test Results**

A report letter with the applicant's exam result is delivered to each test-taker from the test vendor (Meazure Learning). Each certification exam is scored as "pass" or "fail". Each test-taker may access exam results via the vendor's (Meazure Learning) secure, password protected portal for up to one (1) year following the exam date.

### **Record Retention**

IIBEC maintains candidate application, eligibility, exam, and certification records in accordance with its established record retention policy. At a minimum, records are retained for the duration of the active certification cycle plus one additional cycle, or longer if required by law or accreditation standards.

### Re-testing

Following approval of an applicant's complete application, an applicant has two (2) years to pay the exam fee, take the exam, and obtain a passing exam score. Within that timeframe, if an applicant does not produce a passing score on the initial testing attempt, a re-test can be scheduled every four (4) months until the two (2) years have elapsed. The exam fee shall be paid by the test-taker for each exam session.

### **Exam Appeals**

Candidates have the right to appeal certain exam-related decisions, including denial of eligibility, exam administration irregularities, exam results, or disciplinary actions. Appeals must be submitted using the official Appeals Form and process described in the *Appeals* section of this Handbook.

# **Additional Resources/Exam Preparation Guidance**

IIBEC exam rules provided in this Handbook are the authoritative requirements for all candidates. These rules take precedence over any vendor-supplied guidance.

These weblinks, indicated below, offer webpages with suggestions that CBECxP applicants may find useful when preparing for exam day. Beyond these public sources, many books and articles are available on the topic of exam preparedness. Each applicant should evaluate his/her unique needs and seek information resources best suited to meeting those needs.

### **EXAM EXPECTATIONS**

Source: Meazure Learning

What You're Allowed and Not Allowed to do During Your Exam

(https://support.proctoru.com/hc/en-us/articles/360043127892-What-am-I-allowed-and-not-allowed-to-do-during-

my-exam)

## SYSTEM REQUIREMENTS

Source: Meazure Learning System Requirements

(https://support.proctoru.com/hc/en-us/articles/24692181239309-Equipment-Requirements)

### WHAT TO EXPECT ON EXAM DAY

Source: Meazure Learning What to Expect on Exam Day

(https://support.proctoru.com/hc/en-us/articles/9951434736525-What-to-Expect-on-Exam-Day)

### WHAT TO EXPECT DURING YOUR REMOTE PROCTORED EXAM

Source: Meazure Learning

What To Expect During Your Remote Proctored Exam (https://meazurelearning.wistia.com/medias/x8sicg86fm)

### MEAZURE LEARNING'S IN-PERSON TEST CENTER EXPERIENCE

Source: Meazure Learning

<u>Meazure Learning's In-Person Test Center Experience</u> (https://meazurelearning.wistia.com/medias/ja41hxr9il)

# **GUARDIAN BROWSER INFORMATION**

Source: Meazure Learning

<u>Download the Guardian Browser</u>

https://guardian.meazurelearning.com/
Guardian Browser Support Resources

(https://support.proctoru.com/hc/en-us/sections/9979847689229-Guardian-Proctoring-Browser-Resources)

### **HELP CENTER LINK**

Source: Meazure Learning ProctorU Help Center

(https://support.proctoru.com/hc/en-us/categories/115001818507)

# TEST CENTER LOCATIONS Source: Meazure Learning

Test Center Sites

(https://www.meazurelearning.com/candidate-services)

# PREPARING YOURSELF FOR EXAM DAY

Source: Complete Test Preparation, Inc.

https://test-preparation.ca/test-tactics-mental-preparation/

# **DEALING WITH EXAM ANXIETY**

Source: University of St. Andrews

https://www.st-andrews.ac.uk/guides/exam-anxiety/

# Best Practices Publications Used as Reference Materials in the Development of the CBECxP Exam

Title	Author	Date
ANSI/ASHRAE/IES Standard 202, Commissioning Process for Buildings and Systems, Section 3, Definitions	ASHRAE	2018
ASHRAE Guideline 0, The Commissioning Process, Section 4, Definitions	ASHRAE	2019
ASTM C1153-10, Standard Practice for Location of Wet Insulation in Roofing Systems Using Infrared Imaging	ASTM International	2015
ASTM C1060-11a, Standard Practice for Thermographic Inspection of Insulated Installations in Envelope Cavities of Frame Buildings	ASTM International	2015
ASTM E1105-15, Standard Test Method for Field Determination of Water Penetration of Installed Exterior Windows, Skylights, Doors, and Curtain Walls, by Uniform or Cyclic Static Air Pressure Difference	ASTM International	2015
ASTM E631, Terminology of Building Constructions	ASTM International	2015
ASTM E2947, Standard Guide for Building Enclosure Commissioning	ASTM International	2016
ASTM C1193-16, Standard Guide for Use of Joint Sealants	ASTM International	2016
ASTM E2813, Standard Practice for Building Enclosure Commissioning	ASTM International	2018
ASTM E329-21, Standard Specification for Agencies Engaged in Construction Inspection, Testing, or Special Inspection	ASTM International	2021
CSA Z320-11, Building Commissioning Standard	CSA America, Inc.	2011
CSAZ5000-18, Building Commissioning for Energy Using Systems	CSA America, Inc.	2018
CSA S478-2019, Guideline on Durability in Buildings	CSA America, Inc.	2019
IIBEC Code of Ethics	IIBEC	2022
https://iibec.org/membership/code-of-ethics/		
ISO 21105-1 Performance of Buildings - Building Enclosure Thermal Performance Verification and Commissioning - Part 1 General Requirements	ISO	2019

This list is representative of best practices publications utilized. Review of these publications is not intended as the sole preparation for the exam. Each applicant should prepare accordingly with training, courses, and/or other publications which may be deemed appropriate for the individual's background, experience, and education.

**CBECxP Exam Domains** - During exam development, subject matter experts compiled tasks relating to building enclosure commissioning knowledge and skills. The percentage of exam questions devoted to each domain is listed. (Note: BECx acronym= building enclosure commissioning.)

Domains	Subjects	Percentage of Exam Questions
Section 1	BECx Core Competencies	18.8%
Domain 1.1	Demonstrate knowledge of building enclosure systems and material science	
Domain 1.2	Demonstrate knowledge of procurement and project delivery	
Domain 1.3	Demonstrate knowledge of contract documents and construction administration	
Section 2	BECx Pre-design	21.2%
Domain 2.1	Determine and communicate basic owner project requirements (OPR) related to the building enclosure	
Domain 2.2	Relate basis of design (BOD) to building enclosure requirements	
Domain 2.3	Create building enclosure commissioning (BECx) plan	
Section 3	BECx Design	20%
Domain 3.1	Evaluate design and construction alternatives against OPR	
Domain 3.2	Facilitate communication plan related to OPR, BOD, and BECx plan	
Domain 3.3	Evaluate BECx team	
Section 4	BECx Bidding and Negotiation	9.4%
Domain 4.1	Demonstrate knowledge of contract documents and submittals	
Domain 4.2	Develop testing and observation schedule	
Section 5	BECx Construction	21.2%
Domain 5.1	Observe workmanship versus contract documents and mock- ups.	
Domain 5.2	Compare contractor's QA and QC to contract documents	
Domain 5.3	Explain scope, purpose, and intent of testing; evaluate testing firms and laboratories	
Section 6	BECx Occupancy & Operations	9.4%
Domain 6.1	Compile maintenance and system manual	
Domain 6.2	Develop closeout documentation	
	Total Percentage	100%



# **CBECxP SAMPLE Exam Questions**

The following sample questions are provided solely to illustrate the style and format of the CBECxP exam. They have never appeared on an actual exam and will not be used on future exams. These examples are for practice only and are not intended to represent the full scope of exam content.

# **BECx Core Competencies (Questions 1-3)**

- 1. The owner of a data center in climate zone 2 is considering eliminating the vapor retarder in the roof assembly as part of value engineering. The facility will be operated with 50% relative humidity (RH) at 70°F (21.1°C). Under which conditions should the owner accept this option?
  - A. If the building houses equipment and the project is on-budget
  - B. If vapor retarders are not necessary for water tightness of a roof assembly
  - C. If the project is over budget and there are other means for controlling diffusion
  - D. If the selection and placement of the remaining environmental control layers will effectively control vapor diffusion
- 2. What is AAMA/WDMA/CSA 101/I.S.2/A440 NAFS?
  - A. North American Façade Standard
  - B. National Aluminum Façade Standard
  - C. National Aluminum Fenestration Standard
  - D. North American Fenestration Standard/Specification
- 3. What organization is represented by the acronym AAMA?
  - A. American Asbestos Manufacturers Association
  - B. American Air-Barrier Manufacturers Association
  - C. American Architectural Manufacturers Association
  - D. Architectural Assemblies Manufacturers Association

# **BECx Pre-Design (Questions 4-8)**

- 4. What is the **BEST** definition of Building Enclosure Commissioning (BECx)?
  - A. A process to plan, test and ensure watertight delivery of a structure
  - B. A process to complete drawings and specifications to ensure watertight delivery of a structure
  - C. A quality assurance process from design through occupancy that ensures optimal performance
  - D. A quality assurance process to verify that a structure when delivered meets the Owner's Project Requirements (OPR)
- 5. To ensure the **MOST** effective Building Enclosure Commissioning (BECx) program for a project, who should retain the Certified Building Enclosure Commissioning Provider (CBECxP)?
  - A. Owner
  - B. Architect
  - C. Design engineer
  - D. Construction manager
- 6. What is sensible energy?
  - A. Total energy in a given amount of air at one known condition
  - B. Heat loss or gain that causes changes in the air's dry bulb temperature
  - C. Amount of energy a well-designed heating, ventilation, and air conditioning (HVAC) system utilizes due to smart sensors
  - D. Heat associated with a change in phase and is representative of a change in the air's moisture content with no change in dry bulb temperature
- 7. What is a characteristic of specific humidity?
  - A. It is unaffected by barometric pressure
  - B. It is related to humidity at a specific temperature
  - C. It is related to the mass of water vapor compared to dry air in a column of moist air
  - D. It is directly calculated from the rate of water diffusion and column of condensation at a vapor retarder

- 8. Which is typical of moisture transport by vapor diffusion?
  - A. It is significantly lower than moisture transport from air leakage.
  - B. It is equal to moisture transport from air leakage and is not critical.
  - C. It only occurs in cold climates therefore moisture transport is not critical.
  - D. It can be greater by a factor of 50 than moisture transport from air leakage.

# BECx Design (Questions 9-13)

- 9. In order to demonstrate the OPR has been met for a building's curtain wall system with regard to water infiltration testing, which field testing option may be specified?
  - A. ASTM E1105 and AAMA 501.2
  - B. ASTM E331, ASTM C1601, and AAMA 501.2
  - C. ASTM D5957, ASTM E1105, and AAMA 501.2
  - D. ASTM E1105, ASTM E331, and ASTM E2268
  - 10. What is the order of importance of control layers in a cold climate?
    - A. Air control layer, water control layer, vapor control layer
    - B. Radiant barrier, water control layer, vapor control layer
    - C. Water control layer, air control layer, vapor control layer
    - D. Water control layer, vapor control layer, air control layer
  - 11. What are the **MOST** effective strategies for air/moisture removal within a building enclosure, in order of importance?
    - A. Diffusion, ventilation, drainage
    - B. Drainage, ventilation, diffusion
    - C. Ventilation, diffusion, drainage
    - D. Ventilation, drainage, diffusion
  - 12. During which phase or sub-phase must the first Initial Design Review (IDR) be performed?
    - A. Design phase as directed by the owner
    - B. Schematic design subphase as directed by the architect
    - C. Design development subphase as directed by the owner
    - D. Construction document subphase as director by the contractor

- 13. During the design development subphase, which document records the recommended types and frequency of tests, advises of the consequences of failed tests, and outlines inspection protocols?
  - A. Updated Basis of Design (BoD)
  - B. Updated Owner's Project Requirements (OPR)
  - C. Updated Building Enclosure Commissioning (BECx) plan
  - D. Subcontractor's quality assurance/quality control (QA/QC) plan

# **BECx Bidding and Negotiation (Questions 14-18)**

- 14. For a new data center project located in a cold climate, consider this roof assembly as designed from exterior to interior.
  - Single-ply membrane roof
  - Gypsum roofing cover board
  - Single 4-inch layer of polyisocyanurate insulation
  - Cementitious substrate board
  - Vented steel metal deck
  - 24-inch mechanical space
  - Lay-in ceiling tile

Which component of this roof assembly is **BEST** suited, with the italicized revision, to function as the air barrier?

- A. Gypsum roofing cover board with the application of a self-adhered membrane
- B. Single 4-inch layer of polyisocyanurate insulation increased to 5 inches
- C. Cementitious substrate board with the application of a self-adhered membrane
- D. Lay-in ceiling tile installed in an air-tight manner
- 15. Which IIBEC governing body administers the collection of *Fundamental Canons* and *Rules of Practice* outlining a CBECxP's professional duties and responsibilities?
  - A. Ethics Committee
  - B. Board of Directors
  - C. Technical Advisory Committee
  - D. Codes and Standards Committee

- 16. When a Certified Building Enclosure Commissioning Provider (CBECxP) believes a professional colleague has violated acceptable bidding practices by bribing a prospective client, the CBECxP is encouraged to initiate a complaint with which IIBEC governing body?
  - A. Ethics Committee
  - B. Board of Directors
  - C. Advocacy Committee
  - D. Codes and Standards Committee
- 17. Which IIBEC governing body can amend the IIBEC Code of Ethics?
  - A. Ethics Committee
  - B. Board of Directors
  - C. Advocacy Committee
  - D. Codes and Standards Committee
- 18. Per ASTM E2813 Standard Practice for Building Enclosure Commissioning, which type of testing requirement is in situ field testing for water penetration of all horizontal surfaces?
  - A. Optional
  - B. Selective
  - C. Mandatory
  - D. Pre-determined

# **BECx Construction (Questions 19-21)**

- 19. Which is **BEST** to use for developing a system installation checklist?
  - A. Subcontractor's verbal directions
  - B. Construction manager's field notes
  - C. Manufacturer's written installation instructions
  - D. Verbal advice provided by the installer's field supervisor

- 20. What is quality assurance?
  - A. Finding defective work after it is installed
  - B. Full-time project oversight of work in progress
  - C. Intermittent reviews of the process of work in progress
  - D. Preventing installation of a defective item before it is installed
- 21. Who is responsible for documenting that all tests required in ASTM E2813 for compliance with fundamental or enhanced building enclosure commissioning (BECx) have been performed and have satisfied the performance requirements specified for the project?
  - A. Architect
  - B. Building enclosure consultant
  - C. Testing agency representative
  - D. Certified Building Enclosure Commissioning Provider (CBECxP)

# **BECx Occupancy & Operations (Questions 22-24)**

- 22. Which document is developed through the Certified Building Enclosure Commissioning Provider (CBECxP) process and outlines a building's upkeep?
  - A. Commissioning plan
  - B. Certificate of occupancy
  - C. Quality assurance report
  - D. Operations and maintenance manual
- 23. What is ASTM E1186?
  - A. Air Leakage Site Detection in Window Assemblies
  - B. Water Leakage Site Detection in Building Envelopes and Waterproofing
  - C. Air Leakage Site Detection in Building Envelopes and Air Barrier Systems
  - D. Vapor Diffusion Site Detection in Building Envelopes and Vapor Barrier Systems

- 24. Which standard test method is used for measuring the Air Leakage Rate of a Large or Multizone Building?
  - A. ASTM E779
  - B. ASTM E1258
  - C. ASTM E1827
  - D. ASTM E3158



## **CBECxP Sample Exam Answers:**

- 1. D
- 2. D
- 3. C
- 4. D
- 5. A
- 6. B
- 7. C 8. A
- 9. A
- 10. C
- 11. B
- 12. A
- 13. C
- 14. C
- 15. A
- 16. A
- 17. B
- 18. C 19. C
- 20. C
- 21. D
- 22. D
- 23. C
- 24. D

Page 1 of\_



### **Employment History Form**

Name\_\_\_\_

Date				

Beginning with the current employer, list **positions related to building enclosure commissioning only.** Photocopy this form and use additional pages, as necessary.

	(1) Company Name	
From To*	<ul><li>(2) Address</li><li>(3) City, State, Zip</li><li>(4) Title/Position</li></ul>	Description of position responsibilities. (Briefly, in space provided.)
	(1) (2) (3) (4)	

<sup>\*</sup>Type "Present" to indicate current employer

### Supplement Sheet A



#### **Descriptions of Project Experience Categories**

## 1. Building Enclosure Surveys or Audits

This category applies to performance of a visual building enclosure condition assessment. The assessment would be performed in general accordance with industry-recognized procedures in which the asbuilt condition of the building enclosure is observed, identified, and documented as compared with the construction documents and owner's project requirements. Reporting may be through a standard checklist format or through a narrative report. The report may include photographs and/or video documentation. A drawing will generally be prepared to present the layout of the building enclosure penetrations and findings.

### 2. Preparation or Independent Design Review of Contract Documents (Drawings, Specs, etc.)

This category includes the preparation of a complete set of contract documents-including the bidding documents, general conditions, technical specifications, commissioning plans, sections and details-as specifically related to the building enclosure.

### 3. Develop and Execute a Building Enclosure Commissioning Plan/Program

This category includes a project in which the applicant was directly in a position of management or supervision for developing and executing a plan or program.

#### 4. Building Enclosure Commissioning Observation/Quality Assurance

This category includes observations performed on-site by the applicant during construction, for the assurance of the quality of another's work. The applicant may provide these services independently or under the direction of a supervisor. Written documentation is prepared in the form of narrative reports or checklist reports.

#### 5. Building Enclosure Forensic Investigations, Depositions, Expert Testimony

This category may include site observations, field tests, laboratory tests and analysis, video and photographic documentation, and other procedures implemented in a standard investigation of a project requiring forensics, depositions, and/or expert testimony. Only one point may be claimed for each project for which any of these services are provided.

#### 6. Building Enclosure Moisture Investigations (Infrared, Nuclear, and/or Capacitance)

This category includes the conduct of non-destructive testing (such as an infrared, nuclear, and/or capacitance survey) of the building envelope related to moisture, airtightness, thermal performance, or other characteristics. Investigations are presented in a written report including information regarding the procedures utilized, the findings, and the conclusions from the observations. Recommendations may be presented but are not mandatory. A drawing generally accompanies the report. Photographic and video documentation may or may not be presented, depending upon the project.

#### 7. Building Enclosure Testing: Physical/Quantitative Analyses

This category refers to testing for physical, qualitative, and/or quantitative analysis of building enclosure materials and systems. This could include hygrothermal analysis, test cut analysis, whole-building air tightness testing, material testing, forensic testing, energy modeling, and other procedures utilizing scientific methods and procedures.

#### 8. Research Directly Related to the Building Enclosure

This category would generally relate to research performed during building commissioning projects in which new technology is developed or utilized.

### 9. Authorship of a Publication Related to Building Enclosure Commissioning (Articles, Books, Theses)

This category includes articles, books, theses, etc. related to building enclosure commissioning that have been published. These publications cannot be for marketing purposes and must have a fundamental basis, that is educational or newsworthy.

### 10. Presenting a Lecture Related to Building Enclosure Commissioning (for Educational Purposes)

This category includes lectures that primarily offer educational content or training material.

#### 11. Acting as the Building Enclosure Commissioning Provider or Building Enclosure Commissioning Specialist

This category applies to the administration of building enclosure commissioning and may include some or all of the following duties: documenting the owners project requirements (OPR); drafting and communicating the commissioning requirements for inclusion in agreements; developing the commissioning plan; assigning responsibilities to the building enclosure commissioning team; reviewing the basis of design, technical, and commissioning plan requirements at schematic design, design development, and construction document stages; reviewing construction documents and submittals; conducting or authorizing field reviews and mock-ups; performing construction observations and site visits; updating OPRs and commissioning plans; attending preconstruction sub-contractor meetings; conducting building enclosure commissioning team meetings; documenting requirements for substantial completion.

#### 12. Professional Association Participation

This category includes participation in building enclosure commissioning-related professional association activities such as serving on a committee or task force as a volunteer.

#### 13. Participation in the Building Enclosure Commissioning Process

This category applies to an applicant who is not in the role of Building Enclosure Commissioning Provider or Building Enclosure Commissioning Specialist. The applicant is responsible for implementing a portion of the building commissioning. In most cases, the individual would likely be in the role of owner, architect, design subconsultant, construction manager, general contractor, subcontractor, or manufacturer.



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Project Experience Form (See Supplement Sheet A for descriptions of categories represented by numbered columns.)

Na	ameDate													
		1	2	3	4	5	6	7	8	9	10	11	12	13
#_	Project Name:Project Location:													
	Project Contact:Telephone: Project Date													
#_	Project Name:Project Location:													
	Project Contact:Telephone: Project Date													
#_	Project Name :Project Location:													
	Project Contact:Telephone: Project Date													
#_	Project Name: Project Location:													
	Project Contact:Telephone: Project Date													

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## Attachment Sheet 2, continued

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Project Experience Form (See Supplement Sheet A for descriptions of categories represented by numbered columns.)

		1	2	3	4	5	6	7	8	9	10	11	12	13 I
#_	Project Name: Project Location:Telephone: Project Date													
#_	Project Name: Project Location: Project Contact:Telephone: Project Date													
#_	Project Name :  Project Location:  Project Contact:  Project Date													
#_	Project Name: Project Location:Telephone: Project Date													
#_	Project Name: Project Location: Project Contact:Telephone: Project Date													

v. September 2025

#_	Project Name:	_							
	Project Location:	_							
	Project Contact:Telephone:	_							
	Project Date	_							



## **Affidavit**

Απιαανιτ
Name
Date
State/Province
County of
, being first duly sworn, deposes and says:
(Applicant's Name)
I, the Applicant named above, have read the contents hereof, and to the best of my knowledge and belief the statements contained in this application are true in substance and effect and are made in good faith. I hereby subscribe to and agree to conform to the IIBEC Code of Ethics. I shall endeavor never to place myself in a conflict of interest or permit myself to be placed in a position that would allow for a potential conflict of interest. Conflict of interest shall be defined as any activity or employment having any significant financial benefit or other interest, or acceptance of any contribution if it would reasonably appear that such activity, employment, interest or contribution could compromise my professional and objective judgment as a building enclosure commissioning provider or prevent me from serving the best interest of my client.
I also hereby authorize any individual, company or institution with whom I have been associated to furnish IIBEC with any information concerning my qualifications for Certified Building Enclosure Commissioning Provider which they have on record or otherwise, and do hereby release the individual, company or organization and all individuals connected therewith from all liability for any damage whatsoever incurred by me as a result of their furnishing such information.
Subscribed and sworn to before me this day of, 20
(Signature of Applicant)
(Signature of Applicant)
(SEAL)
My Commission expires

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(Signature of Notary Public)

# **AMERICANS WITH DISABILITIES ACT (ADA)**

## REQUEST FOR SPECIAL NEEDS ACCOMODATION(S) FORM



## Type or Print Legibly Using Black Ink

Full	Last	First	Middle Initial	
Name				
Home	Number and Str	eet		
Address	City	State/Province	Zip/Postal Code	Country
	Email		Phone	
Certification	on Credential Involve	ed in This Request:		
Describe s	specific special need	s accommodation(s) requested:		
	, p =	(-,		
Signature	of Applicant:			
Printed Ap	oplicant Name:			
Date:				

Professional evaluation must have been made no earlier than three (3) years prior to submittal of this request. Professional evaluator must be a licensed healthcare provider: physician, physician assistant, nurse practitioner, or psychologist.

Attestation of Professional Evaluator: It is my opinion that due to the requesting individual's disability, the accommodation(s) described on page 1 of this form is/are appropriate per my evaluation of the requesting individual. Documentation of the requester's disability diagnosis is attached to this form. (Documentation should be in the form of a letter on the professional evaluator's letterhead describing the requesting individual's diagnosis and the need for special accommodation(s).

Signature			-
Date			
Evaluator Name (Printed)			
Professional License/State of Is	ssue/License Expiration		
Address		City	
State/Province	Country		
Email		<u></u>	
Phone			

To Requester - submit\* both pages of this form to: International Institute of Building Enclosure Consultants 434 Fayetteville Street Suite 2400 Raleigh, NC 27601 CBECxP@iibec.org

\*If this form requests special needs accommodations related to exam administration and is submitted subsequent to submittal of the CBECxP application form, please allow ninety (90) days for processing of this request in advance of a desired exam date.



## **Certification Program - Appeal Form**

#### To Appellant:

Please indicate the type of certification program-related appeal you are presenting and provide details regarding your appeal submission.

The appeals fee of \$(USJ50 must be paid to 1/BEC before the appeals submission will be considered. Within thirty (30) days of 1/BEC's receipt of a complete appeals form <u>and</u> payment of the appeals fee, a confirmation of receipt of the appeal will be emailed to the appellant.

Name:		
Address:		
City and State/Province		
Zip/Postal Code:		
Phone:		
Email:		
Certification Credential Involved	d in Appeal:	
Type of Appeal: (mark an 'X')	Certification Denial	
	Examination Results Appeal	(Include Date of Examination
	Recertification Denial	
	Special Accommodations ADA De	enial
Please provide details of your a	ppeal:	
Signature	Date_	

Submit completed form to: CBECxP@iibec.org

Payment \$(US)50 to be mailed to: IIBEC, 434 Fayetteville St., Suite 2400, Raleigh, NC 27601



# **Certification Program - Complaint Form**

To Complainant:

Below, please provide details of your certification program-related complaint and your desired outcome, if applicable.

Within thirty (30) days of IIBEC's receipt of this completed form, a confirmation of complaint receipt will be emailed to you.

Name:		
Address:		
City and State/Province:		
Zip/Postal Code:		
Phone:		
Email:		
Certification Credential Involved in Complaint:		
Please provide details of your complaint:		
Please provide details of your desired outcome, if ap	plicable:	
Signature	Date	

Submit completed form to CBECxP@iibec.org.

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