

## APPLICATION FOR

## REGISTERED EXTERIOR WALL OBSERVER (REWO®)

Dear REWO Applicant:

To become a Registered Exterior Wall Observer (REWO), applicants must meet specific requirements. These requirements include verifiable levels of work experience and education; high ethical standards; and a satisfactory score on an online examination.

The scope of work under this task includes your personal observations during construction for the assurance of the quality of work performed by another individual. In most cases, the person who performs these services would be under the direction or control of a superior, an exterior wall consultant, an experienced design professional and others. In some cases, the exterior wall observer may provide these services directly. Applicants should submit only work experiences done personally, not by a technician under the supervision of the applicant.

All applicants are encouraged to use the online interactive process to complete this application. Once the application has been submitted to the International Institute of Building Enclosure Consultants, all required information must be provided within one year or the application will expire.

The application fee is \$375 for IIBEC members and \$475 for nonmembers. Please allow 75 days for application processing. Applications will be processed within 45 days for an additional expediting fee (\$100 for members and \$150 for nonmembers).

An exam registration form will be provided after the completed application has been submitted to IIBEC and approved. Once you register for the online exam, your information will be submitted to Meazure Learning, the computer-based testing company. The approved candidate will then be contacted by Meazure Learning to schedule a testing session at one of the 1,000 conveniently located testing centers.

Consult <a href="https://www.assessments.meazurelearning.com/test-site-cities/">https://www.assessments.meazurelearning.com/test-site-cities/</a> for the location of the testing center near you. The online exam fee is \$275 for IIBEC members and \$375 for nonmembers.

A study guide is included with this application. One must have an approved application on file at IIBEC to be eligible to take any exam. Approved applications are valid for **two** years and reapplication is required if the applicant does not earn the REWO title within that time period. One must wait a minimum of four months to retest.

As an organization focused on advancing the roofing, waterproofing and exterior wall professions, we look forward to receiving your application and encourage your active involvement in IIBEC.

Sincerely,

Alec Jeffries

Senior Director of Membership & Registrations

International Institute of Building Enclosure Consultants
434 Fayetteville St. Suite 2400
Raleigh, NC 27601
(T) 919-859-0742 (T) 800-828-1902
(F) 919-859-1328
www.iibec.org

## APPLICATION FOR REGISTERED EXTERIOR WALL OBSERVER

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Please review the enclosed packet to verify that you have the following items:

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## INTRODUCTION REGISTERED EXTERIOR WALL OBSERVER PROGRAM

#### **PURPOSE**

- 1. Establish a high standard for the profession of exterior wall quality assurance observation.
- 2. Provide education, both primary and advanced, for the QA observer.
- 3. Encourage members to participate in the educational programs to maintain prescribed standard.
- 4. Advance the dignity and professionalism of the QA observer and discourage unethical practices.
- 5. Enlighten the construction industry and the public in general, regarding the value of qualified, knowledgeable quality assurance exterior wall observers.
- 6. Promote cooperation between related trades to provide for a high level of construction standards.
- 7. Recognize those QA observers who have obtained a high level of proficiency and knowledge by granting them the title Registered Exterior Wall Observer (REWO).

#### THE EXAMINATION

The examination is available at Meazure Learning computer-based testing centers. The candidate must achieve a satisfactory score on the exam, which tests knowledge regarding construction documents, observer responsibilities, exterior wall systems, field observation practices and reporting. Knowledge of various wall systems should include the following: cast-in-place concrete, EIFS, masonry, precast concrete, thin stone, stucco, and wood. The candidate should also possess knowledge regarding various wall claddings and interfaces of exterior wall systems with glazing systems

Although not required the following IIBEC Courses are recommended for those pursuing this designation: Building Envelope Quality Assurance and Exterior Walls Quality Assurance.

#### **EXAM ELIGABILITY REQUIREMENTS**

- 1. Applicant must read and write in English in order to sit for the exam.
- 2. Applicant must qualify in one of the following categories:
  - a. Employment as a QA inspector/ consultant of exterior walls for a cumulative period of 2 years.
  - b. Experience as a Registered Architect/Professional Engineer, Building Inspector/Official, and/or Facilities/Maintenance/Property Manager for a cumulative period of 2 years in the exterior wall systems field.
  - c. Experience in exterior wall construction for a period of 2 years, as a foreman, construction manager, general building envelope contractor, external wall superintendent, etc.
  - d. Employment as an exterior wall systems manufacturer's technical or sales representative for a period of 4 years.

The table below outlines related job titles and the responsibilities individuals in those occupations would perform related to the REWO.

Job Position	Job Responsibilities as Related to REWO
Building Envelope Consultants/ Quality Assurance Observers/Technologists/Technicians	Knowledge of different exterior wall materials, systems and installations when reviewing, specifying and inspecting construction projects. Provide technical support and advice during the exterior wall system selection process.
Registered Architect/Professional Engineer	Knowledge of different exterior wall materials, systems and installations when reviewing, specifying and inspecting construction projects
Construction Managers, General/Building Envelope Contractors, Owner's Representatives	Knowledge of different exterior wall materials, systems and installations when reviewing, selecting, and inspecting construction projects.
Facilities/Maintenance/Property Manager	Knowledge of different exterior wall materials, systems and installations when maintaining facilities.
Building Inspector/Officials	Knowledge of different exterior wall materials, systems and installations when reviewing and inspecting construction projects.
Material Manufacturers Sales/Technical Representatives	Knowledge of different exterior wall materials, systems and installations when providing technical support before, during, and after exterior wall system selection and installations.

- 3. Applicant must accumulate a minimum of 12 Continuing Educational Hours (CEHs) by attending a minimum of 3 building envelope-related seminars (see section 5). The applicant also agrees to continue his/her training and education by earning CEHs or in accordance with the operating procedures established by IIBEC.
- 4. Applicant must establish that he/she has met certain minimum requirements regarding communication skills, personal work experience and other matters regarding character and ethics.
- 5. Applicant must complete and submit an REWO application to IIBEC headquarters, allowing 90 days for processing prior to the desired exam date along with the appropriate application processing fee.
- 6. Applicant shall have a strong moral and ethical character demonstrated by his/her references, experiences and professionalism.
- 7. Applicant shall always be totally objective, unbiased and impartial in his/her observations, recommendations and in all of his/her actions.
- 8. Applicant shall never have a conflict of interest or permit him/her 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 in which the applicant has any significant financial benefit or other interest, or acceptance of any contribution or benefit that could reasonably appear that such activity, employment, interest or contribution could compromise the individual's professional judgment or prevent the individual from serving in the best interest of the client or employer.

#### **MAINTAINING STATUS**

The Registered Exterior Wall Observer must continue his/her activities as a QA observer or in a job requiring the skills of a QA observer and renew his/her registration every year. Requirements include an annual renewal fee and the provision of information regarding continuing educational hours in accordance with the registration renewal procedures established by IIBEC. Registration renewal is the responsibility of the REWO.

Once the applicant has been registered as a QA observer, he/she must maintain his/her employment as outlined above. In the event the QA observer discontinues employment in the construction industry or takes employment with a firm that provides services that cause a conflict of interest, then he/she will forfeit his/her registration. Registration granted by IIBEC shall remain its property.

#### Note:

The intention of the REWO Registration Program is to provide a system that can withstand the scrutiny and criticism of the public sector and of governmental agencies. Registration must be meaningful and comprehensive to identify those observers with exemplary knowledge and skills for the betterment of the industry.

### APPLICATION FOR REGISTERED EXTERIOR WALL OBSERVER



International Institute of Building Enclosure Consultants 434 Fayetteville St., Suite 2400 Raleigh, NC 27601 (800) 828-1902 or (919) 859-0742 Fax (919) 859-1328

Date		 

Type or Print Legibly Using Black Ink Pen **SECTION 1: PROFILE INFORMATION** Full First Middle Last Name Street Number Box Road/Rural Route Apt Home Address City Country State Zip **Email** Date City State Citizenship Birth Have you ever applied for IIBEC Registered Exterior Wall Observer classification before? () Yes ( ) No If yes, please give date of application: Are you a Contractor or employed by one? ( ) Yes ( ) No Type: () General () Roofing () Exterior Walls State and license number for each: Are you employed by or own a company that manufactures, distributes, or sells products or materials? ( ) Yes ( ) No Identify: Do you derive your principal income as an exterior wall consultant or quality assurance observer? ( ) Yes ( ) No If no, what percent of your income do you derive as a consultant? QA observer Do you have any conflict of interest (see page II, item 8 for definition), or do you work for, own, or have interest in any company having such conflicts? ( ) Yes ( ) No **SECTION 2: BUSINESS INFORMATION** Firm employed by: )Other ( )Distributor ( )Consulting ( )Architectural )Engineering ( )Contractor ( )Manufacturer Name of business: **Business Street Address:** City: Zip: Telephone: State: Organization: ( )Individual Proprietorship ( )Partnership ( )Corporation ( )Individual ( )Other (please specify):

#### **SECTION 3: EMPLOYMENT HISTORY**

On Attachment Sheet I, provide information regarding your personal work history background and experience directly related to exterior walls. Do not include employment in non-related fields.

#### SECTION 4: PERSONAL WORK HISTORY

On Attachment Sheet II (with the major heading "PROJECT CONTACT REGISTER"), list **a minimum of 7** projects for which you claim personal work experience. The items below refer to services rendered or tasks performed by you, not by someone under your direction. YOUR experience as an exterior wall quality assurance observer, or other position as specified on page 1, is being evaluated, not your management ability or the experience of your company or your subordinates. Please verify phone numbers are correct before listing.

### SECTION 5: CONTINUING EDUCATIONAL HOURS EARNED

On Attachment Sheet III, provide information regarding continuing educational hours earned through your participation in programs directly related to the building envelope. A minimum of three programs (i.e.: IIBEC, AIA, CSI, CSC or other approved building envelope educational courses) is required and documentation of such participation must be provided. Programs must be technical in nature (not sales or product oriented). Online programs meeting these requirements are acceptable. Documentation should be in the form of a certificate or letter from the sponsoring organization stating the name of the course, date course was held, and number of hours awarded. A minimum of 12 credit hours from a minimum of 3 building envelope-related seminars is required (credit hours must be earned within the last 10 years). There is a maximum of 16 credit hours accepted from any one program.

### SECTION 6: REFERENCES

On Attachment Sheet IV, give names and addresses of five references, at least one of which is a Registered Roof Consultant, Registered Waterproofing Consultant, Registered Exterior Wall Consultant, IIBEC Consultant Member, Registered Architect or Professional Engineer. References may not be related to the applicant. In addition, **only one** reference may be from a current employer or fellow employee. Each reference listed must have direct personal knowledge of your character, ethics, professional reputation and competence. Complete the top portion of the Reference Form (Attachment Sheet V) and make a copy of the form for each person listed on the Reference Summary. Send the form to each person with instructions to return the completed form directly back to IIBEC. References can be e-mailed to **spatterson@iibec.org**.

### **SECTION 7: CODE OF ETHICS FOR RCI, INC.**

The Code of Ethics for IIBEC is included in this application. It outlines the obligations of the quality assurance observer to the public, the client or employer, the profession and the building industry. The Registered Exterior Wall Observer is required to promote and conform to these standards.

#### SECTION 8: AFFIDAVIT CERTIFICATION, AUTHORIZATION AND RELEASE

Please complete Attachment Sheet VII in the presence of a notary and submit to IIBEC with the application.

IMPORTANT: PLEASE MAKE A COPY OF THE ENTIRE COMPLETED APPLICATION BEFORE SENDING IT TO IIBEC. DO NOT DOUBLE SIDE THE ORIGINAL.

Name\_\_\_\_\_

as necessary.

## **SECTION 3: EMPLOYMENT HISTORY**

Date_						
	List in order beginning with th	a first ampleyer v	our work biotom	directly rela	stad to avtarior	
	List in order, beginning with the	e nist employer, y	our work history	directly rela	ated to exterior	
	walls. Do not include employm	ent in non-related	fields or employ	yment. Add	additional sheet	s

From To*	(1) Company Name (2) Address (3) City, State, Zip (4) Title/Position	Description of Experience (Briefly in space provided)
	(1) (2) (3) (4)	

Type "Present" in this column to indicate your current employer. Include month(s) and year(s).

Name	 	 	
Date			

## **SECTION 4: PROJECT CONTACT REGISTER**

Please complete this page with information indicative of the **required years of experience**.

Copy this page as additional space is needed.

Qua	ality Assurance Observation		
1.	Project Name:		
	Project Location:		
	Project Contact:	Telephone:	
	*Date of Project:		
2.	Project Name:		
	Project Location:		
	Project Contact:	Telephone:	
	*Date of Project:		
3.	Project Name:		
	Project Location:		
	Project Contact:	Telephone:	
	*Date of Project:		
4.	Project Name:		
	Project Location:		
	Project Contact:	Telephone:	
	*Date of Project:		
5.	Project Name:		
	Project Contact:	Telephone:	
	*Date of Project:		
6.			
	Project Location:		
		Telephone:	
7.	Project Name:		
	Project Location:		
		Telephone:	
	*Date of Project:		

\*Include month(s) and year(s)

## **SECTION 5: CONTINUING EDUCATIONAL HOURS EARNED**

Name_			
Date			
_			

Course Name	Presented By	Dates	Hours
		Total #	

Note: Certificates stating the name of the course, date, and number of technical hours must accompany this form to substantiate all points claimed. Programs must be technical in nature (not sales or product oriented). To be acceptable, Continuing Educational Hours (CEHs) can be no older than 10 years. There is a maximum of 16 credit hours accepted from any one program. A minimum of 12 credit hours from a minimum of 3 building envelope related programs is required. Online programs meeting the above criteria are acceptable. Please list your continuing educational courses in chronological order!

## **SECTION 6: REFERENCE SUMMARY**

Name	 _	
Date		

Name & Company	Address/City, State, Zip	Telephone and Position/Title

Note: Please complete the top portion of the reference form for each person listed above. Send directly to each reference, who will then send the form directly back to IIBEC.

As of July 2024, references are no longer a requirement for credential applications. Please disregard this section.



## REFERENCE FORM

Date

	BUILDING ENCLUSURE CONSULIANTS			
	Dear	: (I	Print reference's name)	
Βι	An application for Registered uilding Enclosure Consultants (I		een filed with the International Institute	of
	(Applicant)	Of(Company)	(City/state)	
	Will you kindly give the inform helpful in the evaluation of the		vn, and make any comments that may	be
		rences is for the confidential us livulged, except in special case	se of IIBEC. and the source and characes when required by law.	ter
	Both the applicant and the information requested.	Association appreciate your	cooperation in promptly furnishing t	he
		GENERAL INFORMATI	ION	
2. 3. 4. 5.	How long has the applicant be In your opinion is the applican	rofessional ethics and personal een engaged in actual exterior v t competent as a exterior wall o	Il reputation are wall observation work? observer? ed	
Re	emarks:			
				_
Po Bu	gned osition usiness ate_	Are you a legally registe Are you an IIBEC Consu Are you a Registered Ro Are you a Registered W	ered architect?ultant Member?	

If, for some reason, you do not desire to serve as a reference for the applicant, please return this form to us with a comment to that effect.

#### PLEASE RETURN REFERENCE FORM DIRECTLY TO:

Institute of Building Enclosure Consultants 434 Fayetteville St., Suite 2400 Raleigh, NC 27601 (T) 800-828-1902 or 919-859-0742 (F) 919-859-1328

E-mail: spatterson@iibec.org

E-mail Address

# CODE OF ETHICS International Institute of Building Enclosure Consultants Adopted July 17, 2001 Revised March 28, 2006 Revised September 19, 2015

**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 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.

**General Obligations:** Members and registrants shall maintain and further their knowledge of the science in which they practice, and shall maintain the highest possible standard of professional judgment and conduct. Members and registrants shall conduct their practice honestly and impartially, serving with integrity their clients, employers, and/or the public. Learned and uncompromised professional judgment should take precedence over any other motive.

**Obligation to the Public:** Members and registrants shall uphold the letter and spirit of the ethical standards governing their professional affairs and shall consider the full impact of their actions on the community at large.

#### **Fundamental Canons**

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

- 1. Hold paramount the safety, health, and welfare of the public;
- Uphold the letter and spirit of the ethical standards governing their professional affairs, considering the full impact of their actions on the community at large and conducting themselves in a fashion that brings credit to themselves, their employers, their peers, and their profession; and
- 3. Recognize the value and contributions of others engaged in all aspects of consultation, design, and construction.

#### **Rules of Practice**

- Members and registrants shall hold paramount the safety, health, and welfare of the public in the performance of their duties.
  - a. 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, endanger life or property, the member or registrant shall:
    - i. Advise his or her employer and/or client about the decision,
    - ii. Refuse to consent to the decision, and
    - iii. Notify the appropriate building authority charged with the enforcement of the applicable laws or regulations.
  - b. Members or registrants who have knowledge of any alleged violations of this Code shall report them to the appropriate public authorities and IIBEC, and shall cooperate with appropriate public authorities and IIBEC in providing such information as may be applicable.
- Members and registrants shall not permit the use of their names or firms nor associate in business ventures with any
  person or firm that they have reason to believe is engaged in fraudulent or dishonest business or professional practices.
- 3. Members and registrants shall uphold the letter and spirit of the ethical standards governing their professional affairs, consider the full impact of their actions on the community at large, and conduct themselves in a fashion that brings credit to themselves, their employers, and their profession by:
  - Engaging only in accurate, appropriate, and truthful promotion of their practice;
  - b. Being respectful of the rights of others in obtaining work or employment;
  - Making only accurate, truthful, and appropriate statements or claims about their qualifications, experiences, or performance;

- d. Being objective and truthful in reports, statements, testimony, and on social media;
- e. Preserving the confidentiality of their clients and employers and serving each in a professional and competent manner:
- f. Exercising unprejudiced and unbiased judgment and conduct when performing all services;
- g. Undertaking assignments only when qualified by education and experience in the specific technical fields involved;
- h. Declining any activity or employment, avoiding any financial or other interest, and refusing any contribution if it would reasonably appear that such activity, employment, interest, or contribution could compromise their judgment or conduct or prevent them from serving the best interests of their clients or employers, without making full disclosure to the client and obtaining the client's consent thereto; and
- i. Neither offering nor making any payment or gift to any public official, private client, or industry representative 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.
- 4. Members and registrants shall recognize the value and contributions of others engaged in all aspects of consultation, design, and construction. This means they shall:
  - a. 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;
  - Encourage professional education and research, as well as the development and dissemination of information related to all aspects of consultation, design, and construction of roofing, waterproofing, and exterior wall systems; and
  - c. Take into account applicable laws and regulations and may rely on the advice of other competent and qualified persons as to the intent and meaning of such applicable laws and regulations.
- 5. Members and registrants shall 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.
- 6. Members and registrants shall not intentionally or recklessly mislead existing or prospective clients 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 law or the Code.
- 7. 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 shall file a complaint with the IIBEC Ethics Committee.
- 8. Members and registrants shall maintain and further their knowledge of the science, principles, and ethics of their profession.
- Members and registrants shall be scrupulously honest in their control and spending of monies, and promote effective
  use of resources through open, honest, and impartial service with fidelity to the public, employers, associates, and
  clients.
- 10. Members and registrants shall approve or issue only those documents reviewed or prepared under their direct control and supervision that are determined to be safe for public health and welfare, in conformity with accepted industry standards and applicable laws.
- 11. Certain practices are not in themselves unethical, unprofessional, or contrary to any policy of IIBEC, and IIBEC members and registrants are free to decide for themselves whether to engage in any of these practices, unless in violation of an applicable law. These may include the following:
  - a. Contributing his/her services or anything of value to those endeavors that the member deems worthy;
  - b. Participating in the political process and contributing time and money to political campaigns;
  - c. Submitting competitive bids or price quotations, including in circumstances where price is the sole or principal consideration in the selection of a consultant;
  - d. Providing discounts; or Providing pro bono services.

#### **Enforcement and Amendment**

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

## AFFIDAVIT REGISTRATION AUTHORIZATION AND RELEASE (to be notarized)

State of	
County of	
(Applicant's Name)	, being first duly sworn, deposes and says:
(Applicant's Name)	
belief the statements contained in this appropriate the statements contained in this appropriate to and agricultate of Building Enclosure Consultants of interest or permit myself to be placed interest. Conflict of interest shall be definited in the state of the state of activity, employment, interest or contribution.	the contents hereof, and to the best of my knowledge and plication are true in substance and effect and are made in ree to conform to the Code of Ethics for the International (IIBEC). I shall endeavor never to place myself in a conflict d in a position that would allow for a potential conflict of ned as any activity or employment having any significant of any contribution if it would reasonably appear that such oution could compromise my professional and objective bserver or prevent me from serving the best interest of my
furnish IIBEC with any information concerr which they have on record or otherwise, a	mpany or institution with whom I have been associated to ning my qualifications for Registered Exterior Wall Observer and do hereby release the individual, company or institution m all liability for any damage whatsoever incurred by me as i.
Subscribed and sworn to before me this	day of, 20
	(Signature of Applicant)
(SEAL) My Commission expires	(Signature of Notary Public)



## Application for Registered Exterior Wall Observer Payment Form

Enclosed is a che	ck in the amount of: [ ] \$375.00	member fee [ ] \$475.00 nonmember fee
	Expediting fee: [ ] \$100.00	member fee [ ] \$150.00 nonmember
Charge my [ ] V	ISA [ ] MasterCard [ ] Ame	rican Express [ ] Discover for:
	[ ] \$375.00 member fee	[ ] \$475.00 nonmember fee
	[ ] 100.00 member expedition	g [ ] \$150.00 nonmember expediting fee
Name	fee	
Account Number		Expiration Date
	3- or 4-Digit Verification V	alue Code
Signature		Date
Bill to Address:	(If different from what is listed	on the application)
Address:		
City:	State: Zip	code:

\*Please allow 75 days for application processing. Applications will be processed within 45 days for the expediting fee listed above. Once the application is submitted, all outstanding information must be received within 1 year or the application will become null and void. Please return the completed application along with payment in US dollars to:(email preferred)

International Institute of Building Enclosure Consultants
434 Fayetteville St., Suite 2400
Raleigh, NC 27601
(T) 919-859-0742 or 800-828-1902 (F) 919-859-1328
Email: spatterson@iibec.org

## CHECKLIST TO ACCOMPANY REGISTERED EXTERIOR WALL OSERVER APPLICATION

	Applicant's Name	Date	
A ch	eck or initial in the block at the right indicates	s that you have completed that requirement o	of the application.
1. <i>F</i>	Application fee enclosed (\$375.00 members/	\$475.00 nonmembers)	
		n	
	Section 3 of the application - Attachment She		
			п
b	o. All employers' names and addresses are	listed	
c	e. Brief description of experience under each	h employer is listed	
4. 5	Section 4 of application - Attachment Sheet II		
a	a. Each project for which I claim experience	is listed on Attachment Sheet II	
b	o. All names, addresses, telephone number	s and dates of projects listed	
C		e (not someone under my direction)	
C		xperience under the appropriate heading	
_	Section 5 of application - Attachment Sheet II		
		on, dates and credit hours claimed listed	
		s (12 hours) dealing with building envelope te	
	Section 6 of application:		37
	a. Listed on Attachment Sheet IV are five re	ferences, one of whom is a RRC, RWC, REV	VC, IIBEC
<del>-</del> t	. None of the references is a relative		
<del>-c</del>	. No more than one of these references is	a present employer or fellow employee from	current firm D
	I. Made copies of Attachment Sheet V for E	ACH reference. Completed top part only for	each
<del>-</del>	e. Reference forms sent directly to each refe	erence	
7. 5	Section 7 of application: Attachment Sheet V	ı	
	I have read and agree to abide by the IIBI	EC Code of Ethics	
	Section 8 of application: Attachment Sheet V		
а	<ul> <li>Affidavit has been executed and notarized</li> </ul>	d	🗅
com	pleted application form to IIBEC (do not fold	ked, sign below, enclose this checklist or double side, please). Allow 75 days for p ON BEFORE SENDING TO IIBEC for your ov	rocessing. MAKE
here		by the Association, have checked all details I understand that registration is contingent n of the required examination	
		Signature of Applica	nnt
	REWO Application April 2019	12	



## STUDY GUIDE

For the

## REGISTERED EXTERIOR WALL OBSERVER (REWO®) EXAM

Prepared By REWO Examination Development Task Force

International Institute of Building Enclosure Consultants 434 Fayetteville St., Suite 2400 Raleigh, NC 27601 800-828-1902 919-859-0742

## **REWO Study Guide**

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## STUDY GUIDE REWO EXAMINATION International Institute of Building Enclosure Consultants (IIBEC)

#### INTRODUCTION

One early goal of IIBEC was to develop a recognized and highly regarded registration program for Quality Assurance Observers. The primary beneficiaries of this program are the public, the exterior walls industry, and those who become registered.

IIBEC offers its REWO Program to all applicants, members and non-members. Registration is a two-part program based on an application process along with satisfactory performance on a comprehensive computer-based examination.

This study guide outlines subjects that are addressed in the examination; however, it is not intended to be an inclusive listing of every topic. This document is strictly a guide.

The REWO exam development was completed in January 2016 in compliance with the Standard for the Accreditation of Certification Programs as published by the National Commission for Certifying Agencies (NCCA). A committee of subject matter experts followed a rigorous psychometric process in its development.

The examination is not tailored to any one particular area of observation, or to the design and construction practices unique to any geographic area. It deals primarily with exterior wall systems observations in general. It may include all phases of observation (methodology and construction) and include the following exterior wall systems: cast-in-place concrete, EIFS, masonry, precast concrete, thin stone, stucco, and wood.

In order to receive a passing score on the examination, the examinee must be thoroughly familiar with the basic methodology of Q.A.O. and have a broad knowledge of: ethics, construction documents, observer responsibilities, field observation practices, exterior wall systems, and reporting. Preparation for the exam is essential and a list of the references most frequently used in its development is provided.

The exam is offered online by Meazure Learning, a computer-based testing company which has over 1,000 conveniently located testing centers. The exam consists of 75 multiple choice questions and is up to three hours in duration.

Consult https://www.assessments.meazurelearning.com/test-site-cities/ for a conveniently located testing site near you.

Approved applications have a two-year shelf life; and once the application has expired, reapplication will be necessary.

Although not required, the following courses provided by IIBEC are highly recommended for those pursuing the REWO designation: *Exterior Wall Quality Assurance*, *Exterior Walls Technology and Science* 

A sample of documents/references which were used to develop the REWO exam is as follows:

#### References\*

	Title	Author	Pub. Date
1	Architectural Sheet Metal Manual, 7th Edition	SMACNA	2012
2	ASTM (All Volumes Related to Exterior Walls)	ASTM	2014
3	Construction Contract Administration Practice Guide	CSI	2011
4	CSI The Project Resource Manual: CSI Manual of Practice, 5th Edition	CSI	2004
5	Masonry Design and Detailing, 5th Edition	Christine Beall	2012
6	Master Format Numbers and Titles	CSI	2014
7	RCI Manual of Practice	RCI (now IIBEC)	2010
8	IIBEC Code of Ethics	IIBEC	2015
9	Sealants: The Professionals' Guide	SWRI	2013
10	SWR Institute Safety & Health Field Manual	SWR Institute	2009
11	SWR Safety Health Manual Program Guide	SWR Institute	2004

<sup>\*</sup>The references listed above are only some of the many that were used in the development of this exam. This is meant to serve as a guide to illustrate the types of references used; this is not a recommendation or suggestion to purchase all of the publications listed. The most useful tool in preparation for the exam is the following list of skills, knowledge and responsibilities identified by the task force as those associated with acceptable performance within the exterior wall quality assurance observer profession. It is recommended that the applicant review this list as it relates to one's experience/skill set and then prepare accordingly with the courses and/or publications which may be helpful to the individual.

As part of the exam development process, the task force of subject matter experts systematically compiled a list of objectives that relate to the responsibilities, knowledge, and skills associated with acceptable performance within the exterior wall quality assurance observer profession. This list provided the organizational framework for the exam and is included below. The percentage of questions on the exam from each section is indicated.

Sections	Section/Objective Title	Percentage of questions from section on exam
Section 1	Construction Documents	13%
Objective 1.1	Describe the elements of construction documents	
Objective 1.2	Identify industry standards relevant to exterior wall systems	
Objective 1.3	Describe industry standard tests related to exterior wall systems	
Section 2	Observer Responsibilities	25%
Objective 2.1	Describe exterior wall observer responsibilities	
Objective 2.2	Demonstrate knowledge of ethical standards	
Objective 2.3	Demonstrate knowledge of basic measurements and calculations	
Objective 2.4	Describe basic communication skills	
Objective 2.5	Describe field observation safety practices	
Section 3	Exterior Wall Systems	22%
Objective 3.1	Describe exterior wall system materials	
Objective 3.2	Demonstrate knowledge of exterior wall system construction	
Objective 3.3	Describe exterior wall system design types	
Section 4	Field Observation Practices	23%
Objective 4.1	Describe field observation procedures during construction	
Objective 4.2	Describe field observation procedures during testing	
Section 5	Reporting	17%
Objective 5.1	Describe the elements of a field report	
	Total	100%

## **REWO Sample Exam Questions**

Sample questions are provided from each section of the exam and are indicative of the types of questions the examinee will encounter. Exhibits and answers have been provided at the end of the study guide. Partial credit is not given for one correct answer where two are required.

#### **Construction Documents**

- **1.** As defined by the *RCI (now IIBEC) Manual of Practice*, which two elements are included in the contract documents? (Choose two.)
  - A. general conditions
  - B. building permits
  - C. specifications
  - **D.** inspection reports
- **2.** Which documents include qualitative requirements for products, materials, and workmanship?
  - A. drawings
  - B. submittals
  - C. shop drawings
  - D. specifications
- **3.** Which CSI division section includes specifications applicable to the installation of manufactured stone veneer over metal lath?
  - A. Division 3
  - **B.** Division 4
  - C. Division 7
  - D. Division 8
- 4. Refer to Exhibit #1

Which type of sealant failure is shown in the exhibit?

- A. adhesive
- B. cohesive
- C. elastic
- **D.** plastic

### **Observer Responsibilities**

**5.** The installer of an exterior wall system on a large out-of-town project rotates crews at irregular intervals to help limit overtime charges.

According to the RCI (now IIBEC) Manual of Practice, which statement is correct in this scenario?

- A. Crew changes do not need to be documented, as installer personnel and costs are not within the scope of the REWO.
- **B**. Crew changes should be documented, identifying the installer's supervisory personnel on the project during each site visit.
- *C*. Crew changes should be recorded on the installer's pay application, and reviewed by the REWO for approval prior to submitting for payment.
- D. Overtime charges should be recorded on the installer's pay application, and reviewed by the REWO for approval prior to submitting for payment.
- **6.** You are asked to provide a statement of qualification for an upcoming project which requires you to have an REWO credential. Although your application for the registration exam has been accepted, you have not yet successfully completed the exam.

According to the IIBEC Code of Ethics, which statement is true?

- A. You may list REWO under your qualifications.
- **B.** You may not list REWO under your qualifications, unless you add a qualifier that the credential is pending.
- C. You may not list REWO under your qualifications.
- D. You may not list REWO under your qualifications, unless you add a qualifier that someone else in your firm has the credential.
- 7. An REWO is on-site to document the quantity of air barrier applied that day. Workers complete work on the 4th, 5th, and 6th floors on the east elevation during the site visit. Wall segments for each floor measure 60 feet [18.3 meters] long by 10 feet [3.0 meters] tall. Each of the six window openings on the 4th floor measure 4 feet [1.2 meters] by 6 feet [1.8 meters]. Each of the four window openings on the 5th floor measure 8 feet [2.4 meters] by 6 feet [1.8 meters]. The 6th floor does not have any windows.

Approximately how many square feet [square meters] of air barrier was applied on the east elevation?

- A. 864 square feet [80 square meters]
- B. 1464 square feet [134 square meters]
- *C.* 1656 square feet [154 square meters]
- D. 1800 square feet [167 square meters]

**8.** During installation of the EIFS, the subcontractor encounters a field condition that varies from the contract documents and approved shop drawings. The subcontractor brings the field condition to the attention of the REWO.

What should the REWO recommend that the subcontractor do?

- *A.* Call the general contractor and verbally agree on a solution.
- **B.** Issue a Request for Information (RFI).
- C. Contact the EIFS manufacturer and obtain recommendations.
- *D.* Perform the work based on the subcontractor's previous experience.
- **9.** An REWO is performing QA observation of an exterior Portland cement plaster (stucco) wall installation from a scaffold.

According to the Sealant, Waterproofing, and Restoration Institute Safety and Health Manual, which personal protective equipment (PPE) should the REWO wear in addition to a hard hat?

- A. ear protection
- **B.** eye protection
- C. hand protection
- **D.** torso protection

## **Exterior Wall Systems**

- **10.** Which two materials are Type 1 vapor retarders? (Choose two.)
  - A. spun bond polyolefin building wrap
  - **B.** 6 mil polyethylene sheet
  - C. fiberglass-faced gypsum sheathing
  - **D.** vinyl wall covering

#### 11. Refer to Exhibit #2.

Which type of wall system is shown in the exhibit?

- A. mass
- **B.** barrier
- C. composite
- D. cavity

#### 12. Refer to Exhibit #3.

Which type of wall system is shown in the exhibit?

- A. fiber cement
- $\boldsymbol{B}$ . wood
- *C.* vinyl
- D. composite

#### 13. Refer to Exhibit #4.

Which type of wall is shown in the exhibit?

- A. barrier
- B. drainage
- *C.* mass
- D. rainscreen

#### 14. Refer to Exhibit #5.

During the course of a site visit, an REWO observes that sealant has been applied to the brick ties, as shown in the exhibit, which penetrate through the metal sheathing behind a brick veneer masonry wall.

Before the bricks are laid, which two actions should the REWO take? (Choose two.)

- *A.* Verify that the correct ties have been installed by calling the brick tie manufacturer.
- **B.** Review the approved product submittals and specifications to confirm that the sealant material requirements are met.
- *C.* Arrange for a pull test with the sealant manufacturer to ensure that the sealant adheres to the ties and sheathing.
- D. Review the architectural drawings for the brick tie and sealant installation requirements.

### **Field Observation Practices**

- **15.** An REWO must be knowledgeable about which two areas? (Choose two.)
  - A. building codes
  - **B.** ASCE-07
  - C. bidding instructions
  - D. safety requirements
- **16.** The REWO is onsite during a delivery of fluid-applied waterproofing.

How should the REWO expect the materials to be delivered to the construction site?

- A. loose and on pallets
- B. in unopened containers and packages
- C. with the shipping label and purchase order
- *D.* in boxes covered with waterproof tarps

- **17.** A project that has a \$1000-a-day penalty clause is delayed due to inclement weather. In accordance with the *RCI* (now IIBEC) Manual of Practice, what is the contractor allowed to do?
  - A. Request an extension of the project completion date.
  - **B.** Stop construction until a new completion date is established.
  - *C.* Void warranties on the work completed.
  - D. Void the delay penalty in the contract.
- **18.** What are two responsibilities of the REWO? (Choose two.)
  - A. Tracking production rates against milestones in a project schedule.
  - **B.** Directing the contractor to remove work that is not in conformance with the project documents.
  - C. Confirming material conformance with the project documents.
  - *D.* Ensuring the site is safe for the work being done.
- **19.** A delivery of concrete block for a single wythe wall is delivered to the job site. The REWO questions whether the block was manufactured with the specified water repellant. The contractor performs water droplet testing on six blocks and all fail.

In accordance with the National Concrete Masonry Association, which additional test should be performed?

- A. a full-scale mock-up test
- **B.** an onsite spray bar test
- C. an onsite RILEM tube test
- D. a laboratory test

## Reporting

- **20.** What must a field report do?
  - A. It must report on the means and methods of construction.
  - **B.** It must be objective and factual.
  - *C.* It must document production rates of the contractor's employees.
  - D. It must list all addenda, change orders, and payment requisitions.
- 21. What are two reasons why the REWO reports on the number of workers? (Choose two.)
  - A. to ensure that qualified individuals are completing the work according to the contract
  - B. to identify who might be responsible for deficiencies related to a day's work
  - C. to assist in administering the contract
  - D. to confirm that the staffing requirements of the contract are being met

#### 22. Refer to Exhibit #6.

During a site visit, the REWO observes the condition shown in the exhibit at a recently completed EIFS wall installation.

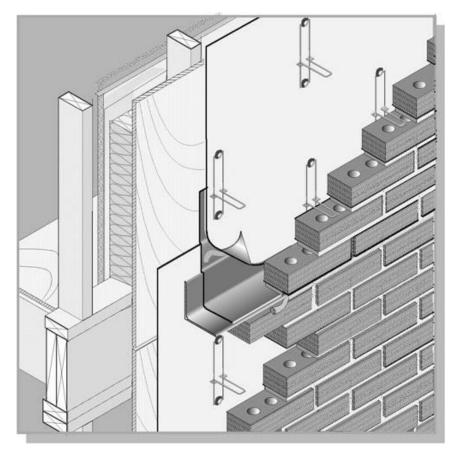
What should the REWO include in the field report?

- A. EIFS application occurred during wet weather conditions and did not cure properly.
- B. EIFS will need to be removed and replaced due to deterioration.
- *C.* The EIFS lamina is damaged near the downspout.
- *D.* Mold has grown on the EIFS due to moisture content of sheathing behind EIFS.

## Exhibit #1



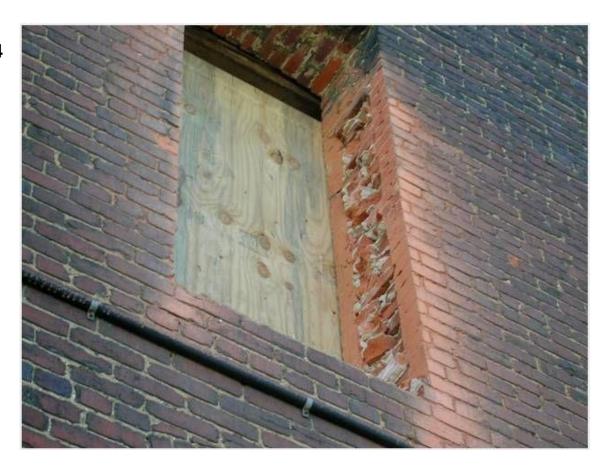
## Exhibit #2



## Exhibit #3



Exhibit #4



## Exhibit #5

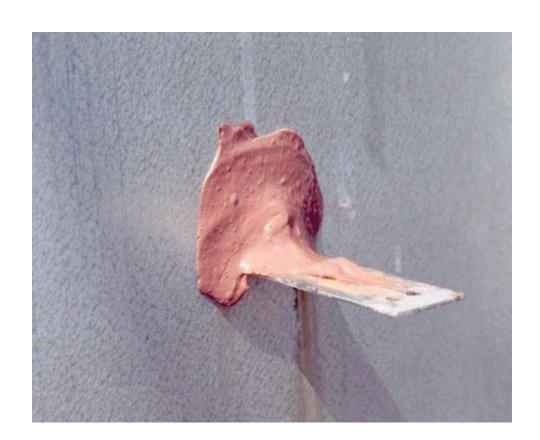


Exhibit #6



## **REWO Sample Exam Answers**

Note your answers. Review the appropriate document(s) in those areas to better understand the rationale behind the indicated correct answer.

Take advantage of the programs provided by IIBEC which are specifically recommended for those pursuing the REWO designation: **Exterior Wall Quality Assurance, Exterior Walls Technology and Science.** 

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