# GREEN ASSOCIATE

# **CANDIDATE HANDBOOK** LEED<sup>®</sup> GREEN ASSOCIATE<sup>™</sup>

Updated July 2018

REGISTERING FOR YOUR EXAM
THE EXAM
Exam Development Exam Format Exam Language Exam Maintenance
PRE-EXAM CHECKLIST
Are You Ready? Exam Security What to Expect at the Test Center Identification Requirements Test Center Regulations Grounds for Dismissal from the Test Center
AFTER YOUR EXAM
Exam Results Passing the Exam Designating Your Credential Certificates Credential Maintenance Program Exam Content Appeals Candidate Confidentiality
EXAM SPECIFICATIONS
Specifications References Sample Questions
CONTACT INFORMATION

# **REGISTERING FOR YOUR EXAM**

# Registration

- 1. Log in to your Credentials account by using your existing USGBC<sup>®</sup> site user account or creating a new account if you do not have one.
- 2. Verify that the name you enter in matches the name on the ID you will present at the test center. If it does not match, please update your name in your site user account "settings." This may be of special concern to candidates who use more than one name (e.g., individuals who use a nickname or those who use different names in different regions). Please update your name with GBCI® at least 5 days prior to your exam. Contact GBCI if you experience issues updating your name.\*
- 3. Select the LEED Green Associate exam under the credentials section and follow the instructions on the screen to complete the application.
- 4. You will be redirected to prometric.com/gbci to schedule your exam date and location.
- 5. When the exam appointment is scheduled, you will receive a confirmation number onscreen and from Prometric through an email.
- 6. Record your confirmation number. You will need this confirmation number to confirm, cancel or reschedule your appointment through the Prometric website, prometric.com/gbci.
- 7. Once you have scheduled an exam, please print your confirmation notice from Prometric. Keep your confirmation notice for any communication with Prometric about your exam.

Once you register and pay for your exam, you have one year to schedule your exam session. Upon taking your exam, if your attempt was unsuccessful you may register again in the same way as initial registration. After three unsuccessful attempts, however, you must wait 90 days before submitting a new registration to GBCI. Candidates must pay the registration fee for each exam attempt.

Learn about GBCI's exam refund/rescheduling policy.

To schedule five or more candidates at one time, contact customer service.

\*If your native language utilizes non-Roman characters, be sure to enter your name in Roman characters when you register for the exam. Make sure to bring identification, such as a passport that includes your name in Roman characters, to the test center.

# Eligibility Requirements

GBCI recommends that candidates taking the LEED Green Associate exam have exposure to LEED and green building concepts through educational courses, volunteering or work experience prior to testing.

All candidates must also agree to the Disciplinary and Exam Appeals Policy and credentialing maintenance requirements, and, if audited, must be willing to provide requested information.

# Audits

GBCI reserves the right to conduct an audit at any time (including prior to application submission and after credential has been granted) of all current and past exam applications. Any information contained in your Credentials account may be audited and a request for further documentation of any information or claims submitted by the LEED professional may be made at any time. GBCI further reserves the right to take disciplinary or legal action—including but not limited to revocation of credential(s)—in the event that any conduct discovered during such an audit violates the LEED professional Disciplinary and Exam Appeals Policy, GBCI policy and/or law.

# **Testing Accommodations**

If you have a documented disability that would prevent you from taking a LEED professional exam under normal testing conditions, you may request accommodations. GBCI complies with the provisions of the Americans with Disabilities Act (ADA). Under the ADA, entities that administer standardized examinations must offer the examinations in a place and manner that is accessible to candidates with disabilities. This may require reasonable modifications to the manner in which the exam is administered. Prometric, GBCI's exam delivery company, will provide candidates reasonable auxiliary aids and services, except where it may fundamentally alter the validity of the exam results. Available accommodations include, but are not limited to, a reader, a scribe and extended testing time.

If you require testing accommodations, you must indicate this during your registration process by checking the box that says "Yes, I need testing accommodations." To request accommodations, you and your health care provider will each need to complete one form, the Candidate Form and the Provider Form, to document the disability and the need for accommodation.

There is no additional charge for testing accommodations. Each request will be evaluated individually.

GBCI will review this documentation and, if approved, will alert Prometric of the necessary accommodations. If proper documentation is submitted, please allow up to two weeks to receive a reply from GBCI. Once you request testing accommodations you will not be able to schedule an appointment with Prometric until your request is approved. You will be contacted by email regarding the approval status of your testing accommodations request.

# Exam Fees

See the exam page on the USGBC website for pricing. Your paid exam fee is good for only one exam attempt.

For USGBC members to receive member pricing for your exam, please link your member status to your USGBC account prior to registration.

# GI Bill Benefits

The LEED professional exams have been approved by the U.S. Department of Veterans Affairs for reimbursement. The VA, in accordance with the GI Bill, has agreed to reimburse veterans, active service members, eligible dependents, spouses and reservists for the cost, up to \$2,000, of any of the LEED professional exams administered by GBCI since December 3, 2009. Learn more.

# THE EXAM

### Exam Development

LEED Green Associates have a documented up-to-date understanding of the most current green building principles and practices and are committed to their professional future. The development of a valid exam begins with a clear and concise definition of the knowledge, skills and abilities needed in order to successfully serve as a LEED Green Associate. All LEED exams are developed by a global network of Subject Matter Experts and meet the specifications of a job analysis. The exam specifications are subject to rigorous validation by these experts, which ensures that the exam is valid, measuring what it is intended to measure. Once the exams are launched the exam questions are regularly monitored to ensure continued reliability.

The exams assess candidates' abilities at three hierarchical cognitive levels: Recall, Application and Analysis.

- **Recall Questions:** These questions assess a candidate's ability to recall factual material that is presented in a similar context to the exam references.
- **Application Questions:** These questions provide the candidate with a novel problem or scenario that the candidate can solve using familiar principles or procedures described in the exam references.
- Analysis Questions: These questions assess a candidate's ability to break the problem down into its components to create a solution. The candidate must not only recognize the different elements of the problem, but must also evaluate the relationship or interactions of these elements.

# Exam Format

The LEED Green Associate exam contains 100 randomly delivered multiple choice questions and must be completed in 2 hours.

The exam has both scored and unscored questions. All questions are delivered randomly throughout the exam and candidates are not informed of a question's status, so candidates should respond to all the questions on the exam. Unscored questions are used to gather performance data to inform whether the question should be scored on future exams.

The exam is computer-based. Exam questions and answer options are displayed on screen. The computer records your responses and times your exam. You are able to change your answers, skip questions and flag questions for later review.

During the exam, candidates may submit comments on any question(s) they believe to contain technical errors in content by using the comment button located in the navigation bar. In order to challenge an exam question, the candidate must have commented on the question and provided an explanation of their concerns. After the exam, inform GBCI that you have left comments on your exam; in your correspondence, be sure to note the email address used to sign up for the exam, as well as the date on which you took it. You must notify GBCI within 10 days of your exam date that you have left comments within your exam.

Be prepared to commit 2 hours 20 minutes for the exam. Total exam time is broken out as follows:

- An optional 10 minute tutorial, the 2 hour exam and an optional 10 minute exit survey.
- Be aware that if a candidate exits the exam session before completing the exam, the exam cannot be restarted and the exam session and fee are forfeited.

# Exam Language

The primary language for the exam is English. In the case of any discrepancies between the original English content and the translated content or challenges made to the exams, the English content will be used as the basis of consideration. Translation is offered solely as an aid to non-native English speakers and is provided in Arabic, Brazilian Portuguese, Chinese, French, German, Japanese, Korean and Spanish. The use of translators or foreign-language dictionaries during the examination will not be permitted. Additional time to complete the exam will not be provided. The translated exam will be presented with the English text on top and the translated text below.

Please note the exam tutorial, non-disclosure agreement, and end of exam survey are in English.

### Exam Maintenance

Each year, LEED professional exams are updated on July 1. Exams go through a maintenance process where the questions are evaluated based on performance; poorly performing questions are removed and replaced with new questions. Additionally, questions are reviewed against LEED addenda published through January of the same year to ensure that all questions remain current and valid. Please check the References section of the handbook for the most current list of exam references.

Exams are not offered from June 23 - June 30 of each year in order to accommodate deployment of updated exams at test centers globally.

# **PRE-EXAM CHECKLIST**

# Are You Ready?

### **One Month Before Your Exam**

Ensure that your given name (first name) and surname (last name) in your usgbc.org account matches the given name and surname on the identification you will present at the test center. (See next page.) **If the names do not match, you will not be allowed to test and you will forfeit the exam fee.** 

### One Week Before Your Exam

Confirm that the date, time and location of your exam is correct. If it is not, please visit usgbc.org for information about rescheduling or canceling your exam.

# Exam Security

To ensure the integrity of the LEED professional exams, you will be required to review and accept a nondisclosure agreement that prohibits any disclosure of exam content:

- Exam questions and answers are the exclusive property of GBCI.
- The exam, questions and answers are protected by copyright law. The exam may not be copied or reproduced in part or in whole, by any means whatsoever, including memorization.
- Future discussion or disclosure of the content of the exam, orally or in writing, or by any other means, is prohibited.
- Theft or attempted theft of exam questions is punishable to the fullest extent of the law.
- Failure to comply with the agreement will prevent you from testing.

# What to Expect at the Test Center

It is recommended that you arrive at the test center at least 30 minutes prior to your scheduled exam appointment. Candidates who arrive at the test site after their scheduled exam time will lose their seat.

You will be escorted to a workstation by test center staff. You must remain in your seat during the exam except when authorized to leave by test center staff. Raise your hand to notify test center staff if:

- You experience problems with your computer
- An error message appears on the computer screen (do not clear the message)
- You need to take a break (testing time will NOT be suspended)
- You need the test center staff for any other reason

# Identification Requirements

Candidates must provide a valid, unexpired ID with a signature, a photograph that looks like the candidate and an expiration date. Acceptable examples include:

- Current government-issued photo ID with signature
- Current credit card photo ID with signature
- Current photo ID without signature plus 1 credit card with signature—first and last names must match on both

Examples of acceptable forms of unexpired photo ID include, but are not limited to:

- Driver's license
- Passport
- Military ID
- Green card, permanent residence card, or H-1B visa\*

\*If the ID has a picture but no signature, it must be provided with a form of signature ID (e.g., a credit card) in the same name.

See Prometric's website for more information.

Unacceptable forms of ID include, but are not limited to, an expired ID, an ID without an expiration date and a Social Security Card.

# Test Center Regulations

You must abide by Prometric's security rules while at the test center. See Prometric's FAQs for more information.

# Grounds for Dismissal from the Test Center

Any candidate who engages in misconduct or does not comply with the test proctor's warning to discontinue inappropriate behavior may be dismissed from the test site, have exam results invalidated or be subject to other sanctions. Fraud, deceit, dishonesty or other irregular behavior in connection with taking the exam is strictly prohibited.

GBCI will make a ruling based on the consideration of both the candidate's report and Prometric's report of the incident. To appeal GBCI's ruling, send an email of your formal appeal to GBCI staff. At this stage, the Credentialing Steering Committee will review and make a final ruling on the case.

# AFTER YOUR EXAM

### Exam Results

All LEED professional exams are scored between 125 and 200. A score of 170 or higher is required to pass. Your exam score will be displayed on screen at the end of the exam and a score report will be emailed to you following your exam session.

Within 72 hours of your appointment, your exam results will be processed, your Credentials account will be updated and, if applicable, your badge will be updated in the usgbc.org People directory.

# Passing the Exam

### **Designating Your Credential**

As soon as you have passed the LEED Green Associate exam, you can use the title "LEED® Green Associate™" and/or the logo.

("LEED GA" is not an approved abbreviation for the LEED Green Associate credential, and should not be used under any circumstances.)

Please review the LEED professional credentials section of the USGBC Trademark Policy and Branding Guidelines for additional guidance.

### Certificates

Once your exam results have been processed, you can download a copy of your certificate through your usgbc.org account.

### **Credential Maintenance Program**

For information on credential maintenance, see the CMP Guide.

# Exam Content Appeals

Because of the need for exam security, GBCI will not release exam questions or answers to candidates. GBCI does not respond to complaints or challenges received more than 10 days after the exam date and does not respond to complaints sent to organizations other than GBCI. GBCI will review the questions and you will be notified of the findings.

GBCI does not modify exam scores under any conditions. In the event of a successful exam content appeal, you will be given the opportunity to retest; your score will not be changed. The only way to earn a LEED professional credential is to earn a 170 on the required exam(s).

# Candidate Confidentiality

GBCI recognizes your rights to control personal information. GBCI policy is designed to safeguard this information from unauthorized disclosure. You can change your preference to be contacted through your personal preferences in your usgbc.org account.

To protect your rights to control score distribution, exam scores are released only to you, the exam taker, and authorized GBCI staff. GBCI does not release exam scores except for use in research studies that preserve your anonymity. Candidates' scores will always remain confidential unless released with written consent of a candidate.

Official statistics regarding the LEED Professional exams, including all question performance data, individual data and demographic data, will be considered confidential; however, GBCI may publish aggregate, non-identifying information based on such data.

# **EXAM SPECIFICATIONS**

# Specifications

The following outline provides a general description of exam content areas for the LEED<sup>®</sup> Green Associate<sup>™</sup> exam.

Knowledge Domains reflect the rating systems' credit categories and what one needs to know. These include concepts such as LEED Process, Integrative Strategies, LEED credit categories and Project Surroundings and Public Outreach.

# LEED Green Associate Exam

The LEED Green Associate exam tests your general knowledge of green building practices for both commercial and residential spaces and both new construction and existing buildings as well as how to support other professionals working on LEED projects.

### Knowledge Domains

### 1. LEED Process (16 Questions)

- A. Organization fundamentals (e.g., mission/vision; non-profit; role of USGBC/GBCI)
- B. Structure of LEED rating systems (e.g., credit categories; prerequisites; credits and/ or Minimum Program Requirements for LEED Certification)
- C. Scope of each LEED rating system (e.g., rating system selection; rating system families [BD+C, ID+C, O+M, ND, Homes])
- D. LEED development process (e.g., consensus based; stakeholder and volunteer involvement; rating system updates/evolution)
- E. Credit categories (e.g., goals and objectives of each [LT, SS, WE, EA, MR, EQ, IN, RP]; synergies)
- F. Impact categories (e.g., what should a LEED project accomplish?)
- G. LEED certification process (e.g., certification levels [Certified, Silver, Gold, Platinum]; LEED Scorecard; 3rd party verification; role of documentation submission; LEED Interpretations; Addenda; awareness of different system versions [e.g., LEED Online]; components of LEED Online and Project Registration)
- H. Other rating systems (e.g., in general what other rating systems are out there?)

### 2. Integrative Strategies (8 Questions)

A. Integrative process (e.g., early analysis of the interrelationships among systems; systems thinking; charettes)

- B. Integrative project team members (e.g., architect; engineer; landscape architect; civil engineer; contractor; facility manager, etc.)
- C. Standards that support LEED (e.g., breadth not depth of American Society of Heating, Refrigeration and Air-conditioning Engineers [ASHRAE]; Sheet Metal and Air Conditioning Contractors National Association [SMACNA] guidelines; Green Seal; Energy STAR<sup>®</sup>; HERs; Reference Standards listed in ACPs, etc.)

### 3. Location and Transportation (7 Questions)

- A. Site selection (e.g., targeting sites in previously developed and brownfields/highpriority designation area; avoiding sensitive habitat; located in areas with existing infrastructure and nearby uses; reduction in parking footprint)
- B. Alternative transportation (e.g., type, access and quality; infrastructure and design)

### 4. Sustainable Sites (7 Questions)

- A. Site assessment (e.g., environmental assessment; human impact)
- B. Site design and development (e.g., construction activity pollution prevention; habitat conservation and restoration; exterior open space; rainwater management; exterior lighting; heat island reduction)

### 5. Water Efficiency (9 Questions)

- A. Outdoor water use (e.g., use of graywater/rainwater in irrigation; use of native and adaptive species)
- B. Indoor water use (e.g., concepts of low flow/waterless fixtures; water-efficient appliances; types and quality)
- C. Water performance management (e.g., measurement and monitoring)

### 6. Energy and Atmosphere (10 Questions)

- A. Building loads (e.g., building components; space usage [private office, individual space, shared multi-occupant spaces])
- B. Energy efficiency (e.g., basic concepts of design; operational energy efficiency; commissioning; energy auditing)
- C. Alternative and renewable energy practices (e.g., demand response; renewable energy; green power; carbon offsets)
- D. Energy performance management (e.g., energy use measurement and monitoring; building automation controls/advanced energy metering; operations and management; benchmarking; Energy Star)
- E. Environmental concerns (e.g., sources and energy resources; greenhouse gases; global warming potential; resource depletion; ozone depletion)

### 7. Materials and Resources (9 Questions)

- A. Reuse (e.g., building reuse; material reuse; interior reuse; furniture reuse)
- B. Life-cycle impacts (e.g., concept of life-cycle assessment; material attributes; human and ecological health impacts; design for flexibility)
- C. Waste (e.g., construction and demolition; maintenance and renovation; operations and ongoing; waste management plan)
- D. Purchasing and declarations (e.g., purchasing policies and plans; environmental preferable purchasing (EPP); building product disclosure and optimization [i.e., raw materials sourcing, material ingredients, environmental product disclosure])

### 8. Indoor Environmental Quality (8 Questions)

- A. Indoor air quality (e.g., ventilation levels; tobacco smoke control; management of and improvements to indoor air quality; low-emitting materials; green cleaning)
- B. Lighting (e.g., electric lighting quality; daylight)
- C. Sound (e.g., acoustics)
- D. Occupant comfort, health, and satisfaction (e.g., controllability of systems; thermal comfort design; quality of views; assessment/survey)

### 9. Project Surroundings and Public Outreach (11 Questions)

- A. Environmental impacts of the built environment (e.g., energy and resource use in conventional buildings; necessity of green buildings; environmental externalities; triple bottom line)
- B. Codes (e.g., relationship between LEED<sup>®</sup> and codes [building, plumbing, electrical, mechanical, fire protection]; green building codes)
- C. Values of sustainable design (e.g., energy savings over time; healthier occupants; money-saving incentives; costs [hard costs, soft costs]; life cycle)
- Regional design (e.g., regional green design and construction measures as appropriate; regional emphasis should be placed in Sustainable Sites and Materials & Resources)

### The exam contains 15 unscored questions.

### References

The primary sources for the development of the LEED professional exams are the LEED rating systems. The following list of references is not meant to be comprehensive. When combined with the exam specifications, the candidate has the material from which the exam is based.

### LEED Green Associate Exam

This exam is designed to test the general knowledge of green building practices and how to support other professionals working on LEED projects.

### References

- U.S. Green Building Council. *Green Building and LEED Core Concepts Guide*. 3rd Edition. U.S. Green Building Council, 2011. Print and Digital versions available.
- U.S. Green Building Council. Introductory and Overview Sections. *LEED Building Design + Construction Reference Guide*. v4 Edition. U.S. Green Building Council, 2013.
   \*Note that the introductory and overview sections are available to download separately from purchasing the full reference guide.
- U.S. Green Building Council. *LEED v4 Impact Category and Point Allocation Process Overview.* U.S. Green Building Council, 2013.
- U.S. Green Building Council. *LEED v4 User Guide.* U.S. Green Building Council, 2013.
- U.S. Green Building Council. *Guide to LEED Certification: Commercial.* U.S. Green Building Council, 2014.
- "LEED Certification Fees." U.S. Green Building Council, 2014.
- "Rating System Selection Guidance." U.S. Green Building Council, 2014.
- "Addenda Database." U.S. Green Building Council.

### Sample Questions

**Disclaimer:** The exam questions listed here were discarded in the process of creating questions for new exams.

The questions are provided for your convenience to allow you to better familiarize yourself with the format and general content of questions on exams.

The content of these questions, while representative of the type of questions you can expect, does not necessarily mirror the content that will appear on the actual exams.

Furthermore, your ability to correctly answer these sample questions does not in any way predict or guarantee your ability to successfully answer questions on the actual exams.

### **LEED Green Associate Sample Questions**

### 1. When applying for innovation credits, a project team

(A) Cannot submit any previously awarded innovation credit.

### (B) May receive credit for performance that doubles a credit requirement threshold.

- (C) May submit a product or strategy that is being used in an existing LEED<sup>®</sup> credit.
- (D) May receive a credit for each LEED AP® that is on the project team.

This question represents Knowledge Domain 1E: LEED Process, credit categories.

# 2. A developer wants to make a profit by building a new office that maximizes daylighting and views. What actions might the developer take to fulfill all parts of the triple bottom line?

- (A) Restore habitat onsite
- (B) Purchase ergonomic furniture
- (C) Pursue local grants and incentives

### (D) Provide lighting controllability for occupants

*This question represents Knowledge Domain 9A: Project Surroundings and Public Outreach, environmental aspects of the built environment.* 

# CONTACT

# Prometric

1501 South Clinton Street, Canton Crossing Tower, 14th Floor, Baltimore, MD 21224 prometric.com/gbci

Prometric's website is available for scheduling, rescheduling, cancelling and confirming exam appointments 24 hours per day. To schedule an exam, you will need to have first applied and registered with GBCI. To reschedule, cancel or confirm an exam appointment, you will need your Prometric-issued 16 digit confirmation number.

### **Prometric Call Centers**

North America	
Customer service: To schedule, reschedule, cancel and confirm appointments or for general testing information (Monday to Friday, 8:00 to 20:00 PM ET [GMT -5])	888 215 4154
Candidate care: For any problems encountered during your experience with Prometric (Monday to Friday, 8:00 to 21:00 ET; Saturday, 9:00 to 17:00 PM ET [GMT -5])	800 853 6769
Bulk Registration (five or more candidates)	800 774 1292
Special Conditions (Candidates with disabilities)	800 967 1139
Fax	800 853 6781
Latin America	
To schedule, reschedule, cancel and confirm appointments or for general testing information	+1 443 751 4995
Asia/Pacific	
China (Monday - Friday, 8:30 to 19:00 GMT +10:00)	+86 10 62799911
India (Monday - Friday, 9:00 to 17:30 GMT +05:30)	91 124 4147700
Japan (Monday - Friday, 8:30 to 19:00 GMT +10:00)	0120 347737
Korea (Monday - Friday, 8:30 to 19:00 GMT +10:00)	1566 0990
Australia, Hong Kong, Indonesia, Malaysia, New Zealand, Philippines, Singapore, Taiwan, Thailand and all other Asia/Pacific countries (Monday - Friday, 8:00 to 20:00 GMT +08:00)	603 7628 3333
Europe, Middle East, Africa:	
Europe	31 320 239 540
Middle East (Sunday to Thursday)	31 320 239 530
North Africa (Sunday to Thursday)	31 320 239 530
Sub-Sahara Africa	31 320 239 593

# Green Business Certification Inc.

2101 L Street NW, Suite 500, Washington, DC 20037 | gbci.org

USGBC's website is available 24 hours per day for exam application and registration, information regarding the LEED professional exams and access to your account.

Call Center: 1-800-795-1746 (within the US) or +1-202-742-3792 (outside the US)

GBCI's call center is available Monday through Friday from 9:00 to 17:30 ET for questions regarding exam registration, USGBC or CaGBC member pricing, your Credentials account, the LEED Professional Directory and the LEED professional exams.

### **Exam Department:** usgbc.org/help-topic/professional-exams

GBCI staff are available for questions, comments and concerns regarding certificates, LEED professional exam records, USGBC or CaGBC member pricing refunds, exam content appeals, exam development, exam scoring, exam format and all other LEED professional exam policies and procedures.