



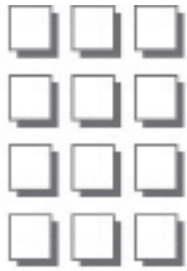
LEED AP Operations + Maintenance Candidate Handbook

Valid for April 2010

Green Building Certification Institute

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LEED® AP Building Design + Construction Candidate Handbook, revised March 2010.



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Information in this Handbook represents current policies and procedures for a LEED professional credentialing exam. Information in this Handbook supersedes information contained in any previously published information.

This booklet may not be brought into the examination.



Eligibility standards, exam content, exam standards, fees, and guidelines are subject to change.

Please read and understand the entire Handbook including all policies, procedures, and consequences.

Changes to the Candidate Handbook

Summary of change	Section(s) affected	Edition
Disciplinary Policy is now the Disciplinary and Exam Appeals Policy as it has been expanded to include exam appeals procedures.	Applying for Your Exam	October 2009
Addition of definition for the term “project experience” for eligibility requirements.	Applying for Your Exam	October 2009
As of December 31, 2009, the fee for canceling or rescheduling within 30 days of your exam appointment will be \$50.	5 Things Every Candidate Should Know; Scheduling Your Exam	October 2009
As of September 1, 2009, Prometric charges the full exam fee at the time of scheduling for candidates in all locations.	Applying for Your Exam	November 2009
<i>Green Building & LEED Core Concepts Guide</i> , 1st Edition; <i>Green Office Guide: Integrating LEED Into Your Leasing Process</i> , Section 2.4; and <i>LEED 2009 for New Construction and Major Renovations Rating System</i> are “Further Reading” for the LEED Green Associate exam and part 1 of the LEED AP exam. As of December 1, 2009, these sources will become primary references.	Preparing for Your Exam	November 2009
The above sources are primary references.	Preparing for Your Exam	December 2009
New guidelines for verifying LEED project participation through LEED Online.	Applying for Your Exam	January 2010
LEED Professional Exams are now eligible for reimbursement by the Veterans Administration for veterans, reservists, and dependents	After Your Exam	January 2010
Instructions on how to designate your credential added	After Your Exam	March 2010
Details on the application audit process added	Applying for Your Exam	March 2010
Information on taking the exam multiple times added	After Your Exam	March 2010

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1) 5 Things Every Candidate Should Know

1 ■ Ensure that your given name (first name) and surname (last name) in My Credentials matches the given name and surname on the identification you will present at the test center. (See page 23.)

If the names do not match, you will not be allowed to test and you will forfeit the exam fee.

2 ■ For USGBC members: to receive member pricing for your exam, you must have linked your member status to your USGBC account (at www.usgbc.org > Your Account > Membership) prior to registration. For CaGBC members: to receive member pricing for your exam, you must have linked your member status to your My Credentials account (by calling GBCI customer service at +1-202-828-1145) prior to registration. The member discount is not automatically applied retroactively to exam registrations that are submitted under non-member pricing.

3 ■ To change or cancel your exam appointment you must do so through Prometric no later than midnight on the third day before your scheduled examination. All exam appointments cancelled/rescheduled 30 days or less before the examination date are charged a \$50 fee. If you do not receive a new confirmation number from Prometric, contact them immediately to confirm that your appointment has been successfully cancelled/rescheduled. (See page 19.)

Keep your confirmation notice for any communication with Prometric about your exam.

4 ■ The only field you cannot edit in your My Credentials account is the name. (If you need to change your name, please contact GBCI credentialing staff at www.gbc.org/contact > Name Changes or at 1-800-795-1746, within the US, or at +1-202-828-1145, outside the US.) Every other field, including username, email address, password, street address, company affiliation, etc., can be changed, so there is no reason to create a new account when you change jobs, locations, or job titles.

5 ■ If you have a documented disability that would prevent you from taking a LEED Professional Credentialing exam under standard conditions, you may request a reasonable accommodation as required by the Americans with Disabilities Act (ADA). Prometric certifies that it shall comply with the provisions of the ADA. (See page 7.)

2) Applying for Your Exam

Applying for an Exam

1. Log in to [My Credentials](#). If you do not have an account, select “First Time Here?” to create one.
2. Select “Apply for a credential exam” from your Current Options. (If you do not see this option, it means that you are not eligible for the exam. [Contact customer service](#) if you have any questions.)
3. Review and, if applicable, update your profile.
4. Verify that your given name (first name) and surname (last name) in [My Credentials](#) matches the given name and surname on the identification you will present at the test center; if it does not, contact GBCI credentialing staff at www.gbci.org/contact > Name Changes or at 1-800-795-1746, within the US, and +1-202-828-1145, outside the US, as you cannot update it yourself.
5. Select your LEED Professional Directory preferences; if you are choosing to be listed, please enter a city, state (ZZ if outside the US and Canada), and country. Press “Submit.”
6. Select your credentialing route and specialty. Review the eligibility requirements, exam format, and fees. Once you are eligible and have all required documentation, press “Submit.”
7. Enter information for a LEED project with which you have participate in the last three years. You are required to provide the name of the LEED Project, the city, state (ZZ if outside the US and Canada), and country, the LEED Rating System under which the project was registered/certified, and the project’s start date. You are also required to upload a letter from a supervisor/client/project manager describing your activities or role on the LEED project. (See Eligibility Requirements on the next page for more information.) Press “Submit.”
8. Select whether you would like special testing accommodations based on the Americans with Disabilities Act (ADA). (See Special Testing Accommodations on page 7 for more information.) Press “Submit.”
9. Review your exam application. Once you have confirmed that all information is correct and all documentation is uploaded, press “Submit.” At this time, you may return to the main menu and leave your application incomplete; however, your application will not be processed until it is completed and submitted.
10. Read GBCI’s [Candidate Terms and Conditions](#), [Disciplinary and Exam Appeals Policy](#), and CMP Guide. Affirm that you have read and agree to all documents by electronic signature. Press “Submit.”
11. Select the credit or debit card type (Visa, MasterCard, American Express, or Discover) with which you will pay the \$100 **non-refundable** LEED AP application fee. Press “Pay fee.”
12. Enter the card number, expiration date, cardholder name, and billing address of the credit or debit card with which you will pay the **non-refundable** application fee. Press “Process Payment.” Do NOT hit the button more than once; doing so may cause multiple charges on your credit or debit card. **Once your payment has been processed, it cannot be refunded; please ensure that you are applying for the correct exam before proceeding.**
13. You will receive an on-screen notification that your application is complete and will be provided with your application reference number.
14. You will receive notice within seven days that your application is approved or, if more information is required, incomplete. If your application is approved, you can proceed to registration. (See Registering for an Exam on page 8.) If the application is denied or expires (see Application Period on the next page), you must wait 90 days before reapplying.

2) Applying for Your Exam

Eligibility Requirements

To take the LEED AP exams, you must have previous experience (see the Definition of “personal involvement with a LEED project” section below), within three years of your application submittal date, on a project registered for LEED certification. This work experience must be documented through LEED Online* or in the form of a letter of attestation from a supervisor, client, or project manager and must describe your involvement on the LEED Project as a consultant, contracted worker, member of the LEED Project Team, LEED Homes Provider, LEED Commercial Reviewer, LEED Homes Green Verifier, or staff member of a Certifying Body (CB).

If you are audited, GBCI auditors will review this letter of attestation based on these requirements:

- The letter must be on letterhead or provide other evidence of its authenticity.
- The body of the attestation should be limited to 1,500 words or less.
- The letter must be dated.
- The letter must be authored and signed by a supervisor, client, project manager, or someone else qualified to evaluate the applicant’s performance.
- The author’s title and relationship to the applicant should be demonstrated, for example the author’s business card.
- The letter must summarize and confirm the applicant’s involvement with the LEED Project.
- The full name or Project ID for the LEED Project must be provided.
- The letter must provide the dates of the applicant’s relevant involvement.
- If the applicant is not currently involved with this LEED project, the end date of this involvement cannot be more than three (3) years ago.

*In order to verify project participation through LEED Online, please submit a screenshot which captures the project name and date, as well as your name and your access to/role within the project.

Candidates must also agree to the [Disciplinary and Exam Appeals Policy](#) and credentialing maintenance requirements and submit to an application audit.

Definition of “personal involvement with a LEED project”

For the LEED AP credentials, to be personally involved with a project registered for LEED certification means that the candidate can show **how they have contributed to the registered project through active participation in it and have on-going responsibility through their participation.** The candidate must show how they have been exposed to the LEED process and have knowledge of the project. The candidate can work in a variety of fashions that are linked to the project.

Examples include working in an on-going, full-time role with the LEED Project team in multiple phases of the project including managing or leading the project design or construction team, or facility management teams by providing installation, supervision, auditing, consulting, managing or other leadership roles with the project team. This list is not meant to be exhaustive, but is meant to provide guidance for candidates with their application.

Audits

2) Applying for Your Exam

Five to seven percent of all applications will be audited; you will be notified immediately if you are chosen for an audit and will be notified of your eligibility within seven days.

GBCI also reserves the right to conduct an audit at any time (including prior to application submission and after accreditation) of all current and past exam applications. Any information contained in a My 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.

Special 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 reasonable accommodations as required by law. Reasonable accommodations are granted to ensure that every candidate has the opportunity to test on a level field with other candidates, but not to provide any candidate with an unfair advantage over other candidates. Accommodation requests are considered on a case by case basis.

Prometric certifies that it shall comply 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 test is administered. Prometric 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 special accommodations to sit for a LEED professional exam, you must indicate this on your Exam Application. To request accommodations, you and your health care provider will each need to complete one form to document the disability and the need for accommodation. You must submit the Candidate and Provider Forms with your application. [Download the Candidate and Provider forms](#). These two forms require you to provide the following information:

- Diagnosis and nature of the disability
- Name of tests used to evaluate the condition
- Length of the condition
- Date you were last seen by your health care provider
- Specific suggested accommodation(s)

There is no additional charge for special accommodations. Each request will be evaluated individually. GBCI credentialing staff will review this documentation within 30 days of the submittal of your application and, if approved, will alert Prometric of the necessary accommodations. Candidates who request special testing accommodations for a LEED credentialing exam will not be able to schedule an appointment with Prometric until their request is approved and arrangements have been made with Prometric. Candidates will be contacted by email regarding the approval status of their special testing accommodations request.

Application Period

2) Applying for Your Exam

An approved application is valid for one year from the approval date. Candidates are allotted three registrations per exam section per one-year application period. This means that a candidate has three chances to meet the minimum competency score of 170 for any given LEED professional credentialing exam section while their application is active.

For a LEED AP credential, the candidate is allowed three attempts per section during the one year application period. Both sections are delivered concurrently unless the candidate previously passed one of the sections during the current application period. In this case, the candidate only will be tested on the section they have not passed. Once the candidate has passed a section of a LEED AP exam, that section will no longer be available to the candidate during their application period. Candidates must pass both sections of a LEED AP exam to earn the credential.

After an application expires, candidates are required to wait 90 days before submitting a new application to GBCI. This means that if a candidate does not earn the credential with their allotted registrations, or if a candidate allows their application period to expire without using their registrations, they must wait 90 days to reapply. If a candidate's application period expires, they must once again demonstrate eligibility for their chosen credential route when they reapply.

Registering for an Exam

1. Go to [My Credentials](#). This will prompt you to log in to your My Credentials account.
2. Select Register for an exam from your Current Options. (If you do not see this option, it means that you have not applied for an exam or that your application has not yet been approved, was denied, or is expired.)
3. Confirm that you understand for which exam you are registering and how to schedule an appointment.
4. Confirm that your member status is correct. **The member discount is not automatically applied retroactively to exam registrations that are submitted under non-member pricing. Please make sure that this pricing is correct BEFORE continuing and generating eligibility ID. (For USGBC members: update your member status by going to www.usgbc.org > Your Account > Membership; for CaGBC members: update your member status by calling GBCI at +1-202-828-1145.)**
5. You will receive on-screen notification that your exam registration is complete. Your eligibility ID will be emailed to you and displayed on the main menu page of your My Credentials account once it has been successfully communicated to Prometric (24-48 hours). You can use this number to schedule an exam through Prometric, available at www.prometric.com/gbci; please see the Contact Information section for your local Prometric phone number.

Candidates may register at any point during their one year application period through My Credentials at www.gbci.org. There is no required waiting time between registrations during the application period; however, candidates may have only one pending registration at any given time.

An eligibility ID is valid for one exam attempt. If you fail one or both parts of the exam, go to [My Credentials](#) and select on "Register for a retake" to retest. However, if you fail to appear for or, due to a failure to present proper identification, are denied access to a scheduled exam appointment, you must contact GBCI or Prometric to reactivate your Eligibility ID so that you may schedule another appointment using the same Eligibility ID. (See Failure to Appear for a Scheduled Exam.)

3) Preparing for Your Exam

Exam Information

A LEED AP is an individual who has passed the exam and possesses the knowledge and skills necessary to participate in the design process, to support and encourage integrated design, and to streamline the application and certification process.

GBCI contracts with a test development firm to develop and deliver the exam. 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 AP. Psychometricians work with experts in the green building industry to identify critical components of the roles and responsibilities of an individual supporting the LEED certification process.

All LEED Professional Credentialing exams are valid and reliable. Validity means that the exam is able to measure that which it is supposed to measure. Reliability is an index of how accurately the exam measures a candidate's skills. A test must be both valid and reliable to be considered a well-developed exam. The LEED AP exam accurately assesses each candidate's ability to carry out the required responsibilities of a LEED AP.

Exam Item Development

Extensive test statistics are calculated in the process of determining test validity and reliability. This includes careful analysis of every item on all LEED Professional Credentialing exams. Exam questions are developed and validated by global work groups of Subject Matter Experts, are referenced to current standards and resources, are developed and monitored through psychometric analysis, and satisfy the test development specifications of a job analysis.

All LEED Professional Credentialing exams assess candidates' abilities at three hierarchical cognitive levels: Recognition, Application, and Analysis. It is not necessary to know an item's cognitive level, and an item's cognitive level may not be obvious. It is only important that candidates understand that these different cognitive levels are assessed so that candidates can demonstrate both the breadth and depth of their knowledge as it pertains to the test specifications. The following definitions do not represent strict divisions between item types but are meant to be explanatory guidelines so that candidates understand the various levels at which they may have to demonstrate knowledge.

- **Recognition Items:** These items assess a candidate's ability to recall factual material that is presented in a similar context to the exam references.
- **Application Items:** These items 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 Items:** These items 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.

3) Preparing for Your Exam

Exam Language

GBCI offers the LEED Professional Accreditation exam in English. 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.

Determining the Passing Score

A valid credentialing exam must have a defensible passing score. The cut score that separates candidates who have not mastered the content must be based on the minimum level of knowledge required as set forth by Subject Matter Experts. The performance of Beta testers was analyzed by professional psychometricians to gain statistics about item performance. The final cut score recommendation was then determined by a group of test development experts and volunteer Subject Matter Experts using the Angoff Method. The final cut score is approved by the GBCI Credentialing Steering Committee.

Exam Fees

Examination fees cover the costs of testing center coordination and staffing, examination development, review, production and scoring. Prometric accepts electronic credit or debit card payment methods. Prometric does not currently accept checks for payment for the LEED Professional exams. Prometric charges the exam fee at the time of scheduling. The exam fee for the LEED AP, per appointment, is:

For combined exam (both part 1, the LEED Green Associate exam, and part 2, the LEED AP specialty exam):

- USGBC or CaGBC national members: \$300
- Non-members: \$450

For the LEED AP specialty exam only:

- USGBC or CaGBC national members: \$150
- Non-members: \$250

Please note that candidates cannot change the credit or debit card information for the payment of a scheduled Prometric appointment without cancelling the appointment with Prometric first.

NOTE TO MEMBERS: The member discount is not automatically applied retroactively to exam registrations that are submitted under non-member pricing. Please make sure that this pricing is correct BEFORE registering. (For USGBC members: update your member status by going to www.usgbc.org > Your Account > Membership; for CaGBC members: update your member status by calling GBCI customer service at +1-202-828-1145.)

3) Preparing for Your Exam

Exam Format

The LEED AP exam is designed to measure your skills and knowledge against criteria developed by Subject Matter Experts and to assess your knowledge and skill in understanding and to assess your understanding and knowledge of the LEED Rating System and ability to facilitate the certification process. The LEED AP exam is comprised of two parts, each part contains 100 randomly delivered multiple choice questions and each part must be completed in 2 hours; total seat time for the LEED AP exam will be 4 hours and 20 minutes including a tutorial and short satisfaction survey.

Exam Timing

While you are permitted up to 2 hours (2:00) to complete the each part of the LEED AP Operations + Maintenance exam be prepared to commit 4 hours and 20 minutes (4:20) to the entire process. Total exam time is broken out as follows: an optional 10 minute tutorial, the 2-hour (2:00) LEED Green Associate exam, the 2-hour (2:00) O+M specialty exam, and an optional 10 minute exit survey.

Specifications

The specifications for each section of the LEED AP Operations + Maintenance exam are organized to include a list of domains and their corresponding knowledge areas. This structure provides the volunteer Subject Matter Experts with a framework to guide the development of exam items to assess whether a candidate is capable of performing specific tasks and services. The following outline provides a general description of exam content areas for the LEED AP O+M exam:

Exam Part 1: LEED Green Associate Exam

The first part of your exam is the LEED Green Associate which 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.

I. Synergistic Opportunities and LEED Application Process

- A. Project Requirements (e.g. site; program; budget; schedule)
- B. Costs (e.g. hard costs; soft costs; life-cycle)
- C. Green Resources (e.g. USGBC; Environmental Building News)
- D. Standards that support LEED Credit (e.g. American Society of Heating, Refrigeration and Air-conditioning Engineers [ASHRAE]; Sheet Metal and Air Conditioning Contractors National Association [SMACNA] guidelines; Green Seal)
- E. Credit Interactions (e.g. energy and IEQ; waste management)
- F. Credit Interpretation Rulings/Requests and precedents that lead to exemplary performance credits
- G. Components of LEED Online and Project Registration
- H. Components of LEED Score Card
- I. Components of Letter Templates (e.g. project calculations; supplementary documentation)
- J. Strategies to Achieve Credit
- K. Project Boundary; LEED Boundary; Property Boundary

3) Preparing for Your Exam

- L. Prerequisites and/or Minimum Program Requirements for LEED Certification
- M. Preliminary Rating (target certification level)
- N. Multiple Certifications for Same Building (e.g. Operations & Maintenance for certified building new construction; core and shell and commercial interior; certified building in neighborhood development)
- O. Occupancy Requirements (e.g. existing building--building must be fully occupied for 12 continuous months as described in minimum program requirements)
- P. USGBC Policies (e.g. trademark usage; logo usage)
- Q. Requirements to Earn LEED AP Credit

II. Project Site Factors

- A. Community Connectivity
 1. Transportation (e.g. public transportation; bike storage; fuel efficient vehicle parking; parking capacity; car pool parking; car share membership [e.g. Zipcar™]; shuttles; carts)
 2. Pedestrian Access (e.g. circulation and accessibility such as cross walks, ramps, and trails)
- B. Zoning Requirements (e.g. density components such as calculations -site area and floor area ratio; construction limits; open space; building footprint; development footprint; specific landscaping restrictions)
- C. Development
 1. Heat Islands (e.g. non-roof; roof; Solar Reflectance Index; emissivity; albedo; heat island effect; green roofs)

III. Water Management

- A. Types and Quality of Water (e.g. potable; graywater; blackwater; stormwater)
- B. Water Management (e.g. water use reduction through fixtures such as water closets; urinals; sinks; lavatory faucets; showers; harvesting; baseline water demand; calculations of Full Time Equivalent; irrigation)

IV. Project Systems and Energy Impacts

- A. Environmental Concerns (e.g. chlorofluorocarbon [CFC] reduction, no refrigerant option, ozone depletion, fire suppressions without halons or CFC's, phase-out plan, Hydrochlorofluorocarbons [HCFC])
- B. Green Power (e.g. off-site generated, renewable energy certificates, Green-e providers)

V. Acquisition, Installation, and Management of Project Materials

- A. Recycled Materials (e.g. pre-consumer, post-consumer, collection requirements, commingled)
- B. Locally (regionally) Harvested and Manufactured Materials
- C. Construction Waste Management (e.g. written plan; accounted by weight or volume; reduction strategies; polychlorinated biphenyl (PCB) removal and Asbestos-containing materials (ACM) management)

VI. Stakeholder Involvement in Innovation

- A. Integrated Project Team Criteria (architect, heating-ventilation-air-conditioning [HVAC] engineer, landscape architect, civil engineer, contractor, Facility Manager)
- B. Durability Planning and Management (e.g. material lifecycle, building re-use)
- C. Innovative and Regional Design (regional green design and construction measures as appropriate and established requirements)

VII. Project Surroundings and Public Outreach

- A. Codes (e.g. building, plumbing, electrical, mechanical, fire protection)

Exam Part 2: O+M Specialty Exam

The second part of your exam is the O+M specialty exam which tests the knowledge and skills necessary to participate in the operation and maintenance of existing buildings that implement sustainable practices and reduce the environmental impact of a building over its functional life cycle

I. Project Site Factors

- A. Development
 1. Lighting (e.g., interior and/or exterior light trespass; lighting zone; maximum candela; illumination levels)
- B. Green management (e.g., integrated pest management for building exterior; nontoxic pest control such as avoiding wood near foundation; sealing openings; techniques for maintaining site vegetation)

3) Preparing for Your Exam

- C. Climate conditions (e.g., seasonal changes; solar availability & clear sky data such as sun path diagrams/charts; day lighting and lighting on streetscapes; precipitation data such as annual averages; a two-year, 24 hour design storm'; temperature such as heating and cooling degree days; relative humidity)

II. Water Management

- A. Water treatment (e.g., techniques such as packaged biological processes)
- B. Stormwater (e.g., rate: imperviousness, pre-development and post-development discharge rate, retention and detention; Watershed Impacts)
- C. Irrigation demand (e.g., evapotranspiration, landscape coefficient such as plant species factor, planting density, microclimate factor)
- D. Chemical management (e.g., medical equipment; cooling tower makeup water; hydrologic cycles such as aquifers, closed loop water cycle; increased water use for hospital and hospitality laundry and sterilization)

III. Project Systems and Energy Impacts

- A. Energy performance policies (e.g., Minimum Energy Performance - building simulation model; Commissioning Agent; prescriptive compliance path options; Carbon footprint; intensity-BTU/SF; emissions reductions; building orientation)
- B. Building components (e.g., required systems; building envelope; HVAC; service water heating; power; lighting; other equipment; lighting power density; receptacle load; insulation; windows; building automation system)
- C. On-site renewable energy (e.g., wind; solar; passive solar; geothermal; biomass; low impact hydro; biogas)
- D. Third-party relationships
 1. Requirements (e.g., design and submittal review; systems manual; follow-up by Commissioning Agent; third party duty requirements)
 2. Alternate rating systems (e.g., ENERGY STAR® portfolio manager, RECs)
- F. Energy performance measurement (e.g., measurement verification, building energy simulation vs. metering devices, payment accountability, capability vs. plan)
- G. Energy tradeoffs (e.g., integration and identification of tradeoffs in energy savings between mechanical, electrical, and building components; lighting design that accounts for daylight and energy conservation)
- H. Sources (e.g., central plants; distributed energy (cogeneration); alternative fuels such as biodiesel, H2 fuel cells, wood-chip gasification)
- I. Energy usage (e.g., building schedules; occupancy and off-hours; indoor/outdoor air usage rates and impact on energy performance)
- J. Specialized equipment power needs (e.g., restaurants; hospital operations)

IV. Acquisition, Installation, and Management of Project Materials

- A. Building reuse (e.g., roof, walls, pre-planned conversion of school building to office use)
- B. Rapidly renewable materials for Facilities Alterations and Additions (e.g. bamboo flooring, cotton batt insulation, wheatboard, cork, wool)
- C. Food materials (e.g., policies for local purchase; organic; on-site personnel such as property manager; food selection including organic options; sustainable harvesting food certifications)
- D. Material acquisition (e.g., certified wood; chain of custody procedures; sustainable purchasing; electronics purchasing and end-of-life management; office supplies; low emitting & fuel efficient fleet vehicles)
- E. Chemical management policy and audit (e.g., community contaminant prevention such as leaks and spills; indoor chemical contaminant prevention such as sanitary sewer, sterilization, laboratory and radiology; pharmaceutical minimization, management and disposal through characterization, policy and program practices; pharmaceutical management and disposal)
- F. Environmental management plan (e.g., reduced mercury in light bulbs; electronic assets; solid waste prevention in purchasing; toxicity prevention in purchasing; toxic chemical reduction)

V. Improvements to the Indoor Environment

- A. Minimum ventilation requirement (e.g., indoor air quality; natural ventilation; mixed mode ventilation)
- B. Tobacco smoke control (e.g., no smoking option; designated smoking area; negative pressure; residential units; weather-stripping; blower door test)
- C. Air quality (e.g., carbon dioxide (CO₂) breathing zone; dense vs. non-dense occupied spaces; HVAC system integration/automation; air filtration [particulate matter reduction practices])

3) Preparing for Your Exam

- D. Ventilation effectiveness (e.g., increase of ventilation by 30%; heat recovery strategy; breathing zone; exfiltration/infiltration)
- E. Indoor air quality (IAQ)
 - 1. Pre-construction - applies to Facility Alterations and Additions (e.g., development of IAQ Management Program; outdoor air ventilation; ventilation systems design for the reduction in indoor air pollutants)
 - 2. During construction - applies to Facility Alterations and Additions (e.g., protection of absorptive materials from moisture damage; MERV 8 filters; permanently installed air handlers during construction; moisture control including indoor moisture issues and dehumidification practices; mold prevention and/or remediation)
 - 3. Before occupancy - applies to Facility Alterations and Additions (e.g., flush out requirements; HVAC system capability; air sample testing option; breathing zone; Infectious Control)
 - 4. During occupancy (e.g., development and implementation of a green cleaning policy; use of products and materials, equipment, procedures; integrated pest management)
- I. Low-emitting materials - applies to Facility Alterations and Additions (e.g., adhesives and sealants; paints; coatings; carpet; composite wood and agrifiber products; VOC's; urea-formaldehyde; VOC budget option)
- J. Indoor/outdoor chemical and pollutant control (e.g., entryway systems; walk-off mat contract for cleaning requirement; hazardous gas mixing; pressurize room; door closers; deck-to-deck partitions; MERV 13 for regularly occupied spaces; reduction practices for radon gas and other soil gas contaminants)
- K. Lighting controls (e.g., individual occupant control; task lighting; dual levels; occupancy sensors; daylight sensors; building automation system; daylighting such as glazing factor; daylight simulation model, daylight measurement, window and floor area, geometry factor, visible transmittance, shading devices, light shelves, skylights)
- L. Thermal controls (e.g., individual occupant control of thermal comfort; operable windows; thermostat; diffusers; radiant panel options; building automation system; thermal comfort design, written plan for corrective action; distribution of space heating and cooling)
- M. Views (e.g., through interior glazing, vision glazing; glare effects on individuals such as patients, students)
- N. Types of building spaces (e.g., regularly occupied spaces; individual occupant work spaces; group multi-occupant spaces)

VI. Stakeholder Involvement in Innovation

- A. Design workshop/charrette (meeting on integrated green strategies)
- B. Ways to earn credit (e.g., innovative methods; building as a teaching tool; tailor lighting color to task; Green educational program; residential construction methodologies; tenant guidelines; documentation of sustainable building costs impacts)
- C. Education of building manager and operations staff (development of a building manual and a demonstration walkthrough of the green features in the building)

VII. Project Surroundings and Public Outreach

- A. Infrastructure (e.g., access information to sewer and water supply service areas; municipal utilities such as availability and capacity of existing lines, future demand, power & water management district)
- B. Zoning requirements (e.g., land use change amendments; public hearings)
- C. Government planning agencies (e.g., Environmental Protection Agency [EPA], local, state, federal, USDA, Public Health Code)
- D. Public-private partnership (incentives and opportunities)
- E. Traffic studies (e.g., trip generation, vehicle miles traveled, existing infrastructure)
- F. Reduced parking methods (e.g., shared parking facilities, carpools, car-share, bike secure parking, telecommuting)
- G. ADA/universal access (e.g., ramps, lifts, accessible, adaptable, visitable)

References

3) Preparing for Your Exam

The primary sources for the development of the LEED Professional Exams are the LEED Rating Systems. Primary references support many of the knowledge areas within the domains of the test specifications; the ancillary references support a few of the knowledge areas. The following list of primary and ancillary references are not meant to be comprehensive. When combined with the test specifications, the candidate has the material from which the exam is based.

Exam Part 1: LEED Green Associate Exam (designed to test the general knowledge of green building practices and how to support other professionals working on LEED projects)

Primary References*

- [Green Building & LEED Core Concepts Guide](#), 1st Edition (USGBC, 2009) (available at www.usgbc.org/store)
- [Green Office Guide: Integrating LEED Into Your Leasing Process, Section 2.4](#) (USGBC, 2009)
- [LEED 2009 for New Construction and Major Renovations Rating System](#) (USGBC, 2009)
- [LEED for Existing Buildings: Operations & Maintenance Reference Guide, Introduction](#) (U.S. Green Building Council, 2008)
- [LEED for Existing Buildings: Operations & Maintenance Reference Guide, Glossary](#) (USGBC, 2008)
- [LEED for Homes Rating System](#) (USGBC, 2008)
- [Cost of Green Revisited](#), by Davis Langdon (2007)
- [Sustainable Building Technical Manual: Part II](#), by Anthony Bernheim and William Reed (1996)
- [The Treatment by LEED® of the Environmental Impact of HVAC Refrigerants](#) (LEED Technical and Scientific Advisory Committee, 2004)
- [Guidance on Innovation & Design \(ID\) Credits](#) (USGBC, 2004)
- [Guidelines for CIR Customers](#) (USGBC, 2007)

Ancillary References

- [Energy Performance of LEED® for New Construction Buildings: Final Report](#), by Cathy Turner and Mark Frankel (2008)
- [Foundations of the Leadership in Energy and Environmental Design Environmental Rating System: A Tool for Market Transformation](#) (LEED Steering Committee, 2006)
- [AIA Integrated Project Delivery: A Guide](#) (www.aia.org)
- [Review of ANSI/ASHRAE Standard 62.1-2004: Ventilation for Acceptable Indoor Air Quality](#), by Brian Kareis (www.workplacegroup.net)
- [Best Practices of ISO - 14021: Self-Declared Environmental Claims](#), by Kun-Mo Lee and Haruo Uehara (2003).
- [Bureau of Labor Statistics](#) (www.bls.gov)
- [International Code Council](#) (www.iccsafe.org)
- [Americans with Disabilities Act \(ADA\): Standards for Accessible Design](#) (www.ada.gov)
- [GSA 2003 Facilities Standards](#) (General Services Administration, 2003)
- [Guide to Purchasing Green Power](#) (U.S. EPA, 2004)
- [LEED 2009 for Operations & Maintenance Rating System](#) (USGBC, 2009)

Exam Part 2: O+M Specialty Exam (designed to test the knowledge and skills necessary to participate in the operation and maintenance of existing buildings that implement sustainable practices and reduce the environmental impact of a building over its functional life cycle)

Primary References

- [LEED for Operations & Maintenance Reference Guide](#), USGBC (available at www.usgbc.org/store)
- [Sustainable Building Technical Manual: Part II](#), by Anthony Bernheim and William Reed (1996)
- [Guidance on Innovation & Design \(ID\) Credits](#) (USGBC, 2004)
- [LEED Online v2—Sample Credit Templates](#) (www.usgbc.org)

Ancillary References

- [Energy Star Portfolio Manager](#) (U.S. EPA; www.epa.gov)
- [Sub-Metering Energy Use in Colleges and Universities: Incentives and Challenges](#) (U.S. EPA; www.epa.gov)
- [ADA Architectural Barriers Act](#) (www.access-board.gov)
- [Buildings and Plants](#) (www.energystar.gov)
- [IESNA Technical Memorandum on Light Emitting Diode \(LED\) Sources and Systems](#) (Illuminating Engineering Society of North America, 2005)

* You should also be familiar with the content of the U.S. Green Building Council's Website, www.usgbc.org, including but not limited to LEED Project Registration, LEED Certification content, and the purpose of LEED Online. The U.S. Green Building Council's LEED Website, www.usgbc.org/LEED, also has free access to LEED Rating Systems, LEED Reference guide Introductions, and Checklists beyond those listed above.

You will also find a list of abbreviations and acronyms in the *LEED for Homes Rating System* on pg. 105–106 and a helpful glossary of terms on pg. 107–114.

Sample Questions

3) Preparing for Your Exam

Disclaimer: The items listed here were discarded in the process of creating items for the new LEED AP Operations and Maintenance exam. The items are provided for your convenience to allow you to better familiarize yourself with the format and general content of items on the exam.

The content of these items, while representative of the type of questions on the LEED AP O+M exam, does not necessarily mirror the content that will appear on the actual exam. Further, your ability to correctly answer these sample items does not in any way predict or guarantee your ability to successfully answer questions on the actual LEED AP O+M exam.

Exam Part 1: LEED Green Associate Exam

Questions:

1: What is the legal instrument that regulates current land use?

- A. Zoning
- B. Licensing
- C. Abatement
- D. Commissioning

2: Why should a green project be located in an existing community?

- A. Adequate parking is available on site.
- B. The zoning approval for the project is easier.
- C. Native plantings can be used for erosion control.
- D. The connection to basic community resources is present.

3: Graywater is most often used for:

- A. drinking.
- B. irrigation.
- C. dishwashers.
- D. swimming pools.

4: What refrigerant contributes the most to global warming potential (GWP)?

- A. HFC-23
- B. CFC-12
- C. Propane
- D. HCFC-123

5: A general contractor (GC) attempts a credit in Local or Regional Materials and discovers that the specified product has only a portion of the material manufactured within the required radius. What should the GC do?

- A. Not list the product
- B. Not use the product
- C. List the entire product
- D. List only the portion within the required radius

Answers:

1: A. Zoning

This question aligns itself with:

- VII. Project Surroundings and Public Outreach
 - A. Codes

2: D. The connection to basic community resources is present.

This question aligns itself with:

- II. Project Site Factors
 - B. Community connectivity
 - 2. Pedestrian Access

3: B. irrigation.

This question aligns itself with:

- III. Water Management
 - A. Types and quality of water

4: A. HFC-23

This question aligns itself with:

- IV. Project Systems and Energy Impacts
 - A. Environmental concerns

5: D. List only the portion within the required radius

This question aligns itself with:

- V. Acquisition, Installation, and Management of Project Materials
 - B. Locally (regionally) harvested and manufactured materials

3) Preparing for Your Exam

6: What Carpet and Rug Institute (CRI) program set standards for low-emitting carpets, adhesives, and pads?

- A. Green Seal
- B. Green Guard
- C. Green-e Certified
- D. Green Label Plus

6: D. Green Label Plus

This question aligns itself with:

- I. Synergistic Opportunities and LEED Application Process
- D. Standards that support LEED credit

Exam Part 2: O+M Specialty Exam

Questions:

1. Which of the following structural control measures is acceptable to retain sediment after erosion has occurred?

- A. Bioswale
- B. Earth dike
- C. Rain garden
- D. Retention pond

2. Reclaimed stormwater may be used for:

- A. cooking.
- B. irrigation.
- C. potable water.
- D. drinking fountains.

3: What team member is permitted to perform an ASHRAE Level 1 walkthrough assessment as required by Energy and Atmosphere credit, Energy Efficiency Best Management Practices?

- A. Project architect
- B. Property manager
- C. Member of building operations staff
- D. Representative of the utility company

4: Which of the following topics must be included in a custodial training program?

- A. Standards for GS-42
- B. Green Seal specifications
- C. EPA regulations for safe handling of cleaning products
- D. Environmental issues associated with disposal of cleaning products and chemicals

Answers:

1. Which of the following structural control measures is acceptable to retain sediment after erosion has occurred?

- B. Earth dike

This question aligns itself with:

- I. Project Site Factors
- B. Green management

2. Reclaimed stormwater may be used for:

- B. irrigation.

This question aligns itself with:

- II. Water Management
- B. Stormwater

3. What team member is permitted to perform an ASHRAE Level 1 walkthrough assessment as required by Energy and Atmosphere credit, Energy Efficiency Best Management Practices?

- C. Member of building operations staff

This question aligns itself with:

- III. Project Systems and Energy Impacts
- A. Energy performance policies

4. Which of the following topics must be included in a custodial training program?

- D. Environmental issues associated with disposal of cleaning products and chemicals

This question aligns itself with:

- IV. Acquisition, Installation, and Management of Project Materials
- E. Chemical management policy and audit

3) Preparing for Your Exam

5. Which of following activities provide source control during construction? (Choose three.)

- A. Install entryway mat
- B. Specify low toxicity products
- C. Specify low VOC content finish materials
- D. Restrict use of toxic materials to non-occupied hours
- E. Recover, isolate, and ventilate toxic material containers

6. An area of overlap between the Americans with Disabilities Act (ADA) and a LEED rating system is:

- A. recycling greater than 90% of the waste stream.
- B. installation of automated doors in all public areas.
- C. improving energy conservation by 30% over current code.
- D. ensuring that the indoor air quality of a building is the best possible.

5. Which of following activities provide source control during construction? (Choose three.)

- B. Specify low toxicity products
- C. Specify low VOC content finish materials
- E. Recover, isolate, and ventilate toxic material containers

This question aligns itself with:

- V. Improvements to the Indoor Environment
 - I. Low-emitting materials

6. An area of overlap between the Americans with Disabilities Act (ADA) and a LEED rating system is:

- D. ensuring that the indoor air quality of a building is the best possible.

This question aligns itself with:

- VII. Project Surroundings and Public Outreach
 - G. ADA/universal access

4) Scheduling Your Exam

Exam Scheduling

1. Go to www.prometric.com/gbc to schedule an exam appointment. Enter your Eligibility ID to proceed with selecting a test site, scheduling a date and time and entering payment information.
2. When the exam appointment is scheduled, you will receive a confirmation number onscreen and from Prometric through an email. Record your confirmation number. You will need this confirmation number to confirm, cancel, or reschedule your appointment through the Prometric website, www.prometric.com/gbc. You will not be able to confirm, reschedule, or cancel with your Eligibility ID. 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.

If you do not receive a confirmation email from Prometric, please call Prometric customer service. Please see the Contact Information section for your local Prometric phone number.

Confirm, Cancel, or Reschedule Exam Appointment

You can confirm, cancel, or reschedule your exam appointment through one of two ways: visit www.prometric.com/gbc anytime and follow the on-screen instructions (this is the recommended method), or call Prometric customer service. Please see the Contact Information section for your local Prometric phone number.

To change or cancel your reservation you must do so through Prometric no later than midnight on the third day before your scheduled examination. You will need your confirmation to reschedule or cancel. All exam appointments cancelled/rescheduled 30 days or less before the examination date are charged a \$50 fee. **If you do not receive a new confirmation number from Prometric, contact them immediately to confirm that your appointment has been successfully cancelled/rescheduled.** Leaving a message at the local test center or contacting GBCI are NOT acceptable methods of cancelling/rescheduling your appointment. After canceling your exam appointment, you will receive a refund of the exam fee from Prometric. If you do not receive a refund within 5 business days, contact Prometric; GBCI does not handle fee refunds due to cancellation.

Exam Appointment	Reschedule/Cancel Deadline
Monday	Previous Friday, by 11:59 pm
Tuesday	Previous Saturday, by 11:59 pm
Wednesday	Previous Sunday, by 11:59 pm
Thursday	Previous Monday, by 11:59 pm
Friday	Previous Tuesday, by 11:59 pm
Saturday	Previous Wednesday, by 11:59 pm
Sunday	Previous Thursday, by 11:59 pm

Your GBCI account does not have a real-time link to Prometric. Please do not check your GBCI account or contact GBCI for Prometric appointment information. Your My Credentials account will not display your appointment information, until after your exam has been delivered and your results have been returned from Prometric. Your GBCI account will show your exam results as “Pending” until GBCI receives your test results from Prometric.

4) Scheduling Your Exam

Failing to Appear for a Scheduled Exam

If you are absent from an exam appointment that you were scheduled to attend, and you did not reschedule or cancel according to the policy, or if you are denied access to an appointment due to a failure to present proper identification, you must contact GBCI or Prometric to reactivate your Eligibility ID so that you may schedule another appointment using the same Eligibility ID. Candidates who are denied entrance to the appointment or who miss a scheduled exam appointment are responsible for all exam fees.

All candidates seeking excused absences based on an emergency situation must contact Prometric's candidate care within 10 days of the original examination date. Please see the Contact Information section for your local Prometric phone number. Prometric will require that you fax documentation of the emergency in order to excuse the absence. Inclement weather is not acceptable as an excused absence unless the test center was closed (see next page). If, on the day of your exam, you are unable to attend the examination for which you are scheduled, you may be excused and be allowed to retest without charge for the following reasons:

- Documented illness, either yourself or immediate family member
- Death in the immediate family
- Disabling traffic accident
- Court appearance or jury duty
- Military duty

Examples of acceptable documentation for excused absences:

Illness: Doctor's note, emergency room admittance, etc.

- Must be signed by a licensed doctor
- Must include the date of the medical visit
- Must include contact information for the licensed doctor
- Does not need to give details of the illness or emergency, but if it does not, the doctor should at least indicate that the candidate should not test.

Death in the Family: Death certificate or doctor's note

- Must be signed by a licensed doctor or mortician
- Must include the date
- Must include contact information for the doctor or mortician

Traffic Accidents: Police report, receipt from the mechanic or towing company

- Must include the date
- Must include contact information

Court Appearance: Court or jury summons, subpoena

- Must include the date
- Must specifically name the candidate

Military Duty

- Must have the date
- Must specifically name the candidate

This list is not exhaustive.

4) Scheduling Your Exam

Inclement Weather or Other Emergencies

Test administration will be delayed or cancelled only in emergencies. If severe weather or a natural disaster makes the test center inaccessible or unsafe, the test administration may be cancelled. In the event of test center closings due to inclement weather, candidates will be contacted by Prometric to reschedule their appointment free of charge.

Bulk Scheduling

To schedule five or more candidates at one time, you may use Prometric's Bulk Registration process. First, candidates should individually apply and register for the exam at [My Credentials](#). (See Applying for an Exam and Registering for an Exam.)

Go to www.prometric.com/gbcj, select "Schedule Exam", select your location, and click Bulk Registration. Enter each candidate's Eligibility ID number and provide payment information to pay the exam fees in bulk. Alternatively, call Prometric's Bulk Registration line and provide each candidate's Eligibility ID number over the phone. Please see the Contact Information section for your local Prometric phone number.

5) Pre-Exam Checklist

Are You Ready?

One Month Before Your Exam

- Ensure that your given name (first name) and surname (last name) in My Credentials 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.

- If you have a documented disability that would prevent you from taking a LEED Professional Exam under standard conditions, you may request a reasonable accommodation as required by the Americans with Disabilities Act (ADA). Prometric certifies that it shall comply with the provisions of the ADA. (See Special Testing Accommodations for more information.)
- Review the address listed in your My Credentials profile so that, if you successfully pass, your certificate is mailed to the most current address. (See Certificates for more information.) To edit your address, go to [My Credentials](#) > Update Profile.

One Week Before Your Exam

- Confirm that the exam scheduled with Prometric is for the correct date, time, and location. If it is not, contact Prometric online at www.prometric.com/gbc with your confirmation number or call Prometric's customer service. Please see the Contact Information section for your local Prometric phone number.

Please note that GBCI does NOT handle scheduling. Do NOT contact GBCI to confirm, reschedule, or cancel an exam appointment. Prometric requires TWO FULL DAYS before your exam to cancel or reschedule. (See the Scheduling Your Exam section.)

- Ensure that your given name (first name) and surname (last name) in My Credentials 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.

- Be prepared to test without anything; no papers, books, food, beverages, bags (including pocketbooks and purses), or electronic devices (including calculators) are allowed in the exam room. Small lockers are provided for candidates to secure purses, wallets, keys, cellular telephones, etc. (See What to Expect at the Test Center.)
- Read and understand this Candidate Handbook, including all policies, procedures, and consequences.

6) The Day of Your Exam

Identification Requirements

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

Identification with photo and signature	OR	Identification with signature	A N D	Identification with photo
Passport		Signed Check Card		Alien ID Card
Driver's License		Signed Credit Card		Employee ID Card
Military ID				Student ID
Signed Photo Check or Credit Card				

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

Name Requirements

Your given name (first name) and surname (last name) in [My Credentials](#) must match the given name (first name) and surname (last name) on the identification you will present at the test center. If the names do not match, you will not be allowed to test and you will forfeit the exam fee. To change your name, contact GBCI at www.gbc.org/contact > Name Changes or at 1-800-795-1746, within the US or +1-202-828-1145, outside the US.

The following examples are examples of non-compliance with the name policy and are NOT allowed to test:

Nicknames	Michael Jones ≠ Mike Jones James Smith ≠ Jimmy Smith
Missing given name	Sarah Catherine Black ≠ Catherine Black John Robert Butler ≠ Robert Butler
Different given name	Lee Chang ≠ John Chang
Different surname	Diane Cooper ≠ Diane Gray
Initial(s) instead of name	D. J. Baker ≠ Daniel Jonathan Baker M. Jason Watson ≠ Mark Jason Watson
Informal given names	Skip Taylor ≠ Robert Taylor
Misspellings/Typos	Thomas Mikker ≠ Thomas Miller

For candidates whose names conform to the cultural naming customs of using two surnames or the cultural naming customs of placing the surname before the given name, the following are allowable:

Two surnames	Jose Garcia Flores = Jose Garcia Jose Garcia Flores = Jose Flores
Surname preceding given name	Lee Ming = Ming Lee

6) The Day of Your Exam

Computer-Based Testing

The LEED Professional Exams are computer-based tests, but candidates do not need extensive computer experience to take a test. 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.

Before starting the exam, you will have the option of taking a short tutorial to familiarize yourself with the computer testing environment. You will have ten minutes to spend on this tutorial. This time will not be deducted from the time you are allotted to complete the exam. Test site proctors are available to answer questions you may have about the computer-based testing system, but they cannot answer questions about the content of the exam itself. GBCI encourages candidates to participate in the tutorial in order to familiarize themselves with the exam format. Be aware that if a candidate exits the exam session, the exam cannot be restarted.

In the event that a software or hardware problem occurs before or during the test, please wait to see if the test center administrator, with assistance from Prometric technical support, can resolve the problem. In the event a computer must be restarted, the computer software has been designed to suspend testing time until the computer is operating again. If your exam cannot be administered because of technical difficulties, your exam will be rescheduled at your earliest convenience.

Test Security

To ensure the integrity of the LEED Professional Exams, specific measures are enforced during the administration of your exam. Before taking the examination you will be required to accept a nondisclosure agreement which prohibits any disclosure of exam content:

- Test questions and answers are the exclusive property of GBCI.
- The examination and the items (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 items is punishable to the fullest extent of the law.

Failure to comply with the agreement will prevent you from testing.

You will be observed at all times while taking the exam. This may include direct observation by test center staff, as well as audio and video recording of your exam session. Your participation in irregular behavior in or around the test center during the exam may result in invalidation of the results of your examination, termination of your candidate status, civil liability, criminal prosecution, or other appropriate sanctions.

6) The Day of Your Exam

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 to get settled, check in, and begin the tutorial. Candidates who arrive at test site after their scheduled exam times will lose their reservations and be considered absent, and the policy for Failure to Appear for a Scheduled Exam will apply.

Your test session should begin within 30 minutes of your scheduled appointment. If circumstances arise at the test site that delay your test session more than 30 minutes after your scheduled appointment time, you will be given the choice of continuing to wait or rescheduling your appointment.

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 additional scratch paper or pencil
- You need to take a break (testing time will NOT be suspended)
- You need the test center staff for any other reason

In the event that you encounter negative conditions at the test site such as HVAC failures, excessive noise, or technology malfunctions we recommend that you immediately notify the proctor and request that the issue is documented in an Incident Report. Be sure to record the Incident Report number. In unlikely cases where such conditions may occur, it does not modify or change the required passing score.

To report a problem with your exam experience, report the incident with the proctor at the test site and call candidate care within 10 days of the original examination date. Please see the Contact Information section for your local Prometric phone number.

Test Center Regulations

Nothing may be brought into the exam room with you. Small lockers are provided for candidates to secure purses, wallets, keys, cellular telephones, pagers, etc. Lockers will not accommodate briefcases, laptop computers or large purses and bags.

- No papers, books, food, beverages, bags (including pocketbooks and purses), or electronic devices (including calculators) are allowed in the exam room.
- Eating, drinking, and tobacco use are prohibited in the exam room.
- Unauthorized paper may not be brought into or removed from the exam room (scrap paper and pencils will be provided by the test site staff and collected at the conclusion of your exam).
- You may not leave the exam room during your exam without the test proctor's permission. If you leave the building during your exam, the test proctor will terminate your exam session.
- You must present your photo ID each time you enter the exam room.

6) The Day of Your Exam

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 appropriate sanctions. Fraud, deceit, dishonesty, or other irregular behavior in connection with taking the exam is strictly prohibited. Irregular behavior includes, but is not limited to, copying or allowing the copying of examination content, failing to work independently, possessing unauthorized devices or source materials, surrogate testing or other dishonest conduct, disrupting other examinees, and possessing, reproducing, or disclosing exam questions, answers, or other information regarding the content of the examination. The following behaviors are considered to be misconduct:

- Giving or receiving assistance of any kind
- Communication with other examinees or with any outside source by way of telephone, personal computer, internet, or any other means during the course of the exam is prohibited.
- Use or suspected use of any prohibited aids (any device that would provide an advantage while taking the exam) during the examination period. This includes but is not limited to LEED Reference Guides, notes, exam references, study materials, practice exams, etc.
- Attempting to take the exam for another person
- Creating a disturbance of any kind
- Removing or attempting to remove examination questions, answers, or notes about the exam, in any format, from the exam room
- Tampering with the operation of the computer
- Failure to comply with the exam regulations of the test proctor

The chief proctor is authorized to take appropriate action to investigate, stop, or correct an observed or suspected irregular behavior or misconduct, including discharging examinees from the exam site and confiscation of any prohibited devices or materials. Examinees or any other persons implicated in an irregularity will be reported to GBCI for further action.

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 www.gbc.org/contact. At this stage, the Credentialing Steering Committee will review and make a final ruling on the case.

7) After Your Exam

Passing the Exam

If you receive a score of 170 or higher on both parts of the exam, you earn the LEED AP designation. Upon receipt of that notification, you may use “LEED AP” followed by your specialty(ies) (BD+C, Homes, ID+C, ND, O+M,) as a professional designation on business cards and signatures. All other instances should be noted as “LEED® AP” followed by your specialty(ies). Passing both parts of a LEED AP exam also authorizes you to use the LEED AP logo that corresponds with your specialty(ies) in accordance with the [GBCI logo guidelines](#).

You will receive an automatic email from GBCI notifying you when your results have posted. If you have elected to have your listing displayed in the LEED Professional Directory, your listing will be posted along with your results.

Two to three months after you pass the exam, you will receive formal notification from GBCI, including a congratulatory letter and a certificate recognizing you as a LEED AP.

Designating Your Credential

Once you have passed all applicable parts of the LEED AP exam on the, you may use the title “LEED AP” followed by your specialty(ies). While LEED is a registered trademark, USGBC and GBCI do not require LEED Professionals to use the ‘®’ or ‘TM’ symbols in email signatures or on business cards. All other instances should be noted as “LEED® AP.”

Certificates

Certificates will be mailed directly from GBCI headquarters two to three months after the test date. In the event that a certificate arrives damaged, with an incorrect name or spelling or, after a reasonable period of time (three weeks after mailing), does not arrive at all, the certificate will be replaced free of charge. These requests should be made in writing to GBCI credentialing staff at www.gbci.org/contact > Certificate Requests.

In the event a LEED Professional loses the certificate, needs a replacement, wants the name on the certificate to be changed, or would like a duplicate certificate, the LEED Professional should forward this request in writing to GBCI credentialing staff at www.gbci.org/contact > Certificate Requests. A twenty-five dollar (\$25) fee will be charged for processing the new certificate. Replacement certificates are processed on a monthly schedule.

Credential Maintenance Program

Candidates who successfully pass both parts of the LEED AP exam must complete 30 Continuing Education (CE) hours biennially. For more information about GBCI’s Credential Maintenance Program (CMP), view the [GBCI website](#), the [CMP Guide](#), and [Frequently Asked Questions \(FAQs\)](#).

7) After Your Exam

Failing the Exam

If you receive a score of 169 or lower on either part of the exam you will be denied the LEED AP credential. You will receive a print out of your exam results which will indicate your performance on each section. You will receive an automatic email from GBCI notifying you when your results have posted.

Retaking the Exam

If you fail the exam, you may retake by registering again (as long as your application is active) in accordance with the following policy. Candidates are allotted three registrations per exam section per one year application period. This means that you have three chances to meet the minimum competency score of 170 for any given LEED Professional Credentialing exam section while your application is live.

For a LEED AP credential, the candidate is allowed three attempts per section during the one year application period. Both sections are delivered concurrently unless the candidate previously passed one of the sections during the current application period. In this case, the candidate only will be tested on the section they have not passed. Once the candidate has passed a section of a LEED AP exam, that section will no longer be available to the candidate during their application period. Candidates must pass both sections of a LEED AP exam to earn the credential.

Please note that candidates are responsible for the full exam fee for the part(s) that they retake.

Earning the LEED AP after the LEED Green Associate

If you successfully complete any of the LEED AP specialty exams during an active LEED Green Associate reporting period, the LEED Green Associate credential will expire and be replaced by the LEED AP with specialty credential. While the LEED Green Associate is an independent credential, it represents knowledge, skills, and ability levels that are subsumed by the LEED AP with specialty credential. Hence, the LEED Green Associate exam specifications and references are equivalent to part 1 of any LEED AP with specialty exam and the CMP requirements are half of the those for the LEED AP with specialty.

However, the LEED AP without specialty credential is not one of the tiered credentials; thus, it can be held concurrently with any other LEED Professional Credential.

Veterans Administration Benefits

The LEED Professional Exams have been approved by the U.S. Department of Veterans Affairs for reimbursement. The VA, in accordance with the G.I. Bill, has agreed to reimburse veterans, eligible dependents, and reservists for the cost, up to \$2000, of any of the LEED Professional Exams administered by the GBCI since December 3, 2008.

[Learn more.](#)

7) After Your Exam

Taking an Exam Multiple Times

LEED Professionals may not retest for a credential they currently hold, except when seeking to maintain their credential through retesting within their CMP retesting period (between 3 and 12 months from the end of their reporting period). (For more information on maintenance through retesting, see the CMP Guide).

Exam Content Appeals

Following completion of the exam candidates may submit, in writing and in accordance with the [Disciplinary and Exam Appeals Policy](#), comments on any question(s) they believe to contain technical errors in content. In your correspondence include your contact information, test date, the specific concerns about the question, as well as an indication of any comments left on the question during the exam. You are not allowed to copy the question before leaving the test center and are not expected to recreate the entire question in your correspondence. GBCI will review the question and you will be notified of the findings. Because of the need for test security, GBCI will not release exam questions or answers to candidates. GBCI does not respond to complaints or challenges received more than 14 days after the test date and does not respond to complaints sent to organizations other than GBCI.

GBCI provides this process for candidates who believe an exam question contains technical errors in content. The exam challenge process is not made available for complaints about fail scores or exam difficulty.

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 by third parties through your My Credentials profile: www.gbc.org > My Credentials > Update Profile.

To protect your rights to control score distribution, exam scores are released only to you, the test taker and authorized GBCI staff. GBCI does not release test scores except for use in research studies that preserve your anonymity. In addition, GBCI does not release any account details to any third parties without the candidate's written permission.

Official statistics regarding the LEED Professional exams, including all item performance data, individual data, and demographic data, will be considered confidential unless officially released by GBCI. Candidates' scores will always remain confidential unless released with written consent of a candidate.

Contact Information

Prometric

1501 South Clinton Street
Canton Crossing Tower, 14th Floor
Baltimore, MD 21224

Website: www.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
Latin America:	
To schedule, reschedule, cancel and confirm appointments or for general testing information	443 751 4995
Asia Pacific:	
Australia and New Zealand (Monday to Friday, 8:30 to 17:00 [GMT +10:00])	612 96405899
China	8610 62799911
India (Monday to Friday, 9:00 to 17:30 [GMT +05:30])	+91 124 4147700
PMI Testing (Monday to Friday, 9:00 to 17:30 [GMT +5:30])	+91 124 4517140
Japan	81 3 5541 4800
Korea	82 2 2116 8331 or 1566-0990
South East Asia (Monday to Friday, 8:00 to 20:00 [GMT +08:00])	60 3 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-Saharan Africa	31 320 239 593

Green Building Certification Institute

2101 L Street NW, Suite 650
Washington, DC 20037

Website: www.gbci.org

GBCI's website is available 24 hours per day for exam application and registration, information regarding the LEED Professional Exams, and access to your My Credentials account.

Call Center: 1-800-795-1746 (within the US) or +1-202-828-1145 (outside the US)

GBCI's call center is available Monday through Friday from 9:00 to 19:00 ET for questions regarding exam registration, USGBC or CaGBC member pricing, My Credentials, the LEED Professional Directory, and the LEED Professional Exams.

Exam Department: www.gbci.org/contact

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.