

LEED™ Professional Accreditation Exam

Study Guide

Introduction

The USGBC offers LEED™ Training Workshops throughout the United States to train building design, construction, and management professionals on how to apply the LEED™ Green Building Rating System and to increase their expertise as sustainable building professionals using LEED™. Professional training and accreditation is intended to create an educated consumer marketplace and provide high quality and qualified LEED™ expertise serving that marketplace.

Exam Development

The LEED™ Professional Accreditation Exam has four sections. The first three sections were developed with contributions from a volunteer Task Force. This group was comprised of Certified LEED™ Pilot Project professionals and other USGBC members with extensive experience in the building and construction industry and the LEED™ Green Building Rating System. The last section, Section IV, is structured using Environmental Building News' Green Building Advisor list of design strategies, correlated with LEED™ credit criteria. The final exam format and questions has been reviewed and approved by the LEED™ Steering Committee and Board of Directors. The exam sections are as follows:

- I. Green Building Design & Construction Industry Knowledge
- II. LEED™ Rating System Knowledge
- III. LEED™ Resources and Processes
- IV. Green Design Strategies

Exam Administration

The LEED™ Professional Accreditation Exam is being offered through a third party administer, Prometric, who offers the exam electronically in over 300 fully outfitted, comfortable, proctored locations nationwide, 6 days a week for 52 weeks of the year. USGBC's goal is to make the examination process conveniently accessible to all its members, workshop attendees, and building industry professionals.

Exam Eligibility

The following qualifications for the LEED™ Professional Accreditation Exam are strongly recommended, but not required:

- Attendance at a USGBC-sponsored LEED™ Training Workshop
- Formal training as an architect, engineer, interior designer, facilities manager, or contractor
- Tenure in the building design and construction industry, or as a building management or operations professional, facilities staff, or executive

Exam Procedure

Candidates apply and schedule directly with Prometric to reserve their time and place to sit for the two-hour exam. Check the LEED Homepage, www.leadbuilding.org for registration information. Results are reported to the candidate immediately upon completion of the exam. Unsuccessful candidates can schedule to retake the exam by repeating the previously described process. Successful candidates will be awarded LEED™ Professional Accreditation certificates through the US mail and listed as LEED™ Accredited Professionals on the USGBC Web site.

Exam Structure & Content

All four sections described above will be administered WITHOUT the use of any open book references such as the LEED Green Building Rating System™, LEED™ Reference Guide, or the LEED™ Training Workbook. All 100 questions are in multiple-choice format. Details of what the exam sections will contain and sample questions are as follows (*note: correct answers below are A.*):

SECTION I: Green Building Design & Construction Industry Knowledge (30 questions)

The purpose of this section is to demonstrate the candidate's general understanding of the green building design and construction industry by testing their knowledge of industry standards and processes as they relate to green building practices and the five categories in LEED Green Building Rating System™.

1. *Sample Question:* Green building practices encourage commissioning agents to be:
 - A. an independent contractor hired directly by the owner.
 - B. hired directly by the mechanical subcontractor.
 - C. typically members of the design team.
 - D. hired at the completion of the project.

2. *Sample Question:* The *Environmental Resource Guide* is a:
 - A. comprehensive guide documenting materials' life-cycle analysis.
 - B. publication of the EPA's list of approved products.
 - C. document of federal guidelines for environmental practices.
 - D. environmental guidelines for wastewater treatment and outflow.

3. *Sample Question:* All of the following are undesirable sustainable sites on which to build except:
 - A. a site within 500 feet of a wetland.
 - B. land that provides habitat to endangered species.
 - C. land at an elevation of 5 feet or below the 100-year flood plain.
 - D. prime agricultural land.

4. *Sample Question:* All of the following describe a material's embodied energy except:
 - A. maintenance and operating energy.
 - B. energy required to harvest/mine, manufacture, transport, and install.
 - C. cradle to grave.
 - D. life-cycle analysis.

SECTION II: LEED™ Rating System Knowledge (20 questions)

The purpose of this section is to demonstrate the candidate's general knowledge of the LEED Green Building Rating System™ Version 2.0.

1. *Sample Question:* The following are all prerequisites for LEED™ Certification except:
 - A. Low-VOC Emitting Materials.
 - B. Fundamental Building Systems Commissioning.
 - C. Storage & Collection of Recyclables.
 - D. Environmental Tobacco Smoke Control.
2. *Sample Question:* Point(s) are credited toward a project's LEED™ Green Building Certification for:
 - A. involving a LEED™ Accredited Professional to guide the project.
 - B. meeting the prerequisites of the rating system.
 - C. registering the project during the early stages of the design.
 - D. having all the design team members take the LEED™ training workshop.
3. *Sample Question:* Constructing a building baseline model establishes a/an:
 - A. foundation to test specific greening strategies to weigh their effect.
 - B. instrument by which to test daylighting.
 - C. benchmark to measure reductions in VOC's on air quality.
 - D. building footprint on its site.

SECTION III: LEED™ Resources and Processes (20 questions)

The purpose of this section is to demonstrate the candidate's understanding of the LEED™ project registration, technical support, and certification process and knowledge of the LEED™ certification documentation requirements.

1. *Sample Question:* LEED™ projects are registered with the USGBC by:
 - A. completing the on-line registration section of USGBC's web site.
 - B. setting up a meeting with USGBC representative.
 - C. completing the USGBC's automated telephone registration.
 - D. printing and completing the on-line registration form and mailing it to USGBC.

2. *Sample Question:* All of the following are avenues of technical assistance for using LEED™ except?
 - A. Unlimited Free Credit Interpretations.
 - B. LEED™ Reference Guide.
 - C. Access to Posted Credit Interpretation Rulings.
 - D. LEED™ Training Workshop.

3. *Sample Question:* LEED™ certification applications should be in the form of project:
 - A. notebooks organized by the LEED™ Rating System credit category.
 - B. description and letter from the owner.
 - C. building plans and specifications.
 - D. scope of work (SOW) and request for proposal (RFP).

SECTION IV: Green Design Strategies (30 questions)

The purpose of this section is to demonstrate the candidate's understanding of green and sustainable design strategies as they relate to LEED™ credits and points. The candidate will be asked to match a green building strategy with the most appropriate LEED™ credit category.

1. *Sample Question:* Use porous pavement systems with high percentage of post-industrial waste:
 - A. Recycled Content
 - B. Landscape & Exterior Design to Reduce Heat Islands
 - C. Erosion and Sedimentation Control
 - D. Resource Reuse

2. *Sample Question:* Use modulating photoelectric daylight sensors:
 - A. Optimize Energy Performance
 - B. Daylight and Views
 - C. Light Pollution Reduction
 - D. Measurement and Verification

3. *Sample Question:* Maintain relative humidity levels between 30%-60%:
 - A. Thermal Comfort
 - B. Controllability of Systems
 - C. Increase Ventilation Effectiveness
 - D. Indoor Chemical and Pollutant Source Control

4. *Sample Question:* Designate construction "staging areas":
 - A. Reduced Site Disturbance
 - B. Construction Waste Management
 - C. Erosion and Sedimentation Control
 - D. Construction IAQ Management Plan