



GREEN ADVANTAGE CERTIFIED PRACTITIONER® (GACP®) CERTIFICATION AND GREEN ADVANTAGE CERTIFIED ASSOCIATE® (GACA®) CERTIFICATION FOR CONSTRUCTION PERSONNEL

Top quality green buildings require top quality green builders.

To ensure that these workers possess the knowledge, skills, and abilities needed for successful green building project delivery, [Green Advantage](#), a non-profit certification body, offers the only two American National Standards Institute accredited green builder certifications specifically designed for construction field personnel across trades:

- The Green Advantage Certified Practitioner (GACP). Targeted to construction supervisors across trades, the GACP certification exam requires familiarity with state-of-the-art green construction means, methods, materials, and over 800 green building best practices, supported by over 2,200 references.
- The Green Advantage Certified Associate (GACA), targeted to construction trades personnel, requires familiarity with a subset of the GACP standards, with over 300 green building best practices, supported by over 1,400 references.

Based upon inputs from scores of experts, the certification standards are a product of a thorough and iterative process that results from a comprehensive literature review as well as inputs from the US and Canadian construction industry. The International Green Builder Certification Board, composed of research and policy, workforce development, design and construction experts, edits, approves, and periodically updates the standards.

Both the GACP and the GACA certifications provide powerful screening tools to building owners, architects, engineers, and contractors to qualify construction workers for green building projects. Moreover, these certifications assist construction personnel in becoming more fully competent in achieving exemplary green construction goals whether they work independently or in teams.

Recognized by a variety of public and private organizations such as the General Services Administration, the Veterans Administration, and the United States Green Building Council, a [LEED Innovation Credit](#) can be earned on projects that utilize Green Advantage Certified personnel.

Certification Overview

All GACP and GACA exam candidates are issued an associated Study Guide that includes pertinent information from the certification standards. The 60-question certification exams for both the GACP and the GACA come from material presented in the certification standards.

The GACP and GACA certification standards meet the following criteria:

- Applicable across building trades
- Compatible with multiple green building rating systems, standards, and codes
- Evidence-based and rigorously sourced
- Results-oriented, promoting achievement of:
 - Environmental goals
 - Health, safety and productivity goals
 - Successful delivery of green buildings and accompanying infrastructure technologies, methods, and best practices
 - Enhanced quality of the production, installation, and operation of construction-related products
 - Disaster resistance/resilience
 - Building security and blast resistance
 - Problem-spotting in the field
 - Insurance and financial claim reductions
 - Cost containment goals and reduced callbacks
 - Reduction of building operational and maintenance costs
 - Enhanced work communication, coordination, collaboration, and efficiency within and among trades

Green Advantage Certification is inclusive and neutral in its approach to green building. As a result, the GACP and GACA certifications are applicable to a variety of green building rating systems, standards, and codes and requires general knowledge of:

- ASHRAE 189.1 (American Society of Heating, Refrigerating, and Air Conditioning Engineers)
- BOMA 360
- BREEAM (Building Research Establishment Environmental Assessment Method)
- Energy Star
- Green Globes
- HERS (Home Energy Rating System)
- ICC 700 (National Green Building Standard of the National Association of Home Builders)
- IgCC (International Green Construction Code)
- LEED (Leadership in Energy and Environmental Design)
- Living Building Challenge
- Net Zero Energy Buildings
- Passive House
- Well Building Standard.

Study Guide content presents information relative to widely accepted thematic categories that appear in a number of the prominent green building rating systems, standards, and codes. The resulting broad topics are: ***Sites, Water, Energy, Materials, and Indoor Environmental Quality.***

In addition, Green Advantage has developed two other construction-delivery topics that “book-end” these five major topics: **Green Building Context** and **Green Building Process**.

- **Green Building Context** describes environmental and human health problems related to conventional building approaches. It summarizes the compelling case for green building, including the perspectives of the three dimensions of the “Triple Bottom Line” of sustainability: environmental, social/human health, and economic considerations.
- **Green Building Process** focuses on the operations of construction activity. For example, the Green Building Process section outlines unique risks of green construction faced by both companies and construction workers. Broad subject areas provide structure to the identification and mitigation of these risks, including:
 - Reducing the business risks related to green building
 - Protecting the health and safety of green builders
 - Lightening the environmental impacts of the construction process

With the exception of Green Building Context, each topical area divides into two subsections:

- **Definitions, Measurements & Standards** presents common green building vocabulary and significant measurements and standards. These apply to information presented in the topic area. For example, “graywater” is a defined term in the Water section; “air exchange rate” is presented in the Energy section. Many terms are also defined within the text, and not listed separately in the definitions section.
- **Green Building Approaches & Best Practices with Associated Construction Phasing** presents information about green alternatives. These serve to counter conventional approaches. The general format lists features and types of specific green building approaches and, in most cases their advantages and disadvantages. Green approaches generally apply to residential and commercial buildings.

GA believes that superior green buildings result from robust cross-disciplinary approaches. Thus, the Study Guide features “best practices.” Best practices demonstrate how and when to apply green building approaches. They provide examples and underline the importance of content previously presented in green building approaches. Best practices should be known and understood by all building personnel involved in a green construction project. Best practices include a list of construction phases in which these practices occur.

The diagram below depicts the range of construction phases applied in six of the seven major topics as represented in the GACP and GACA Study Guides. Major topics reflect how designers “think,” construction phasing reflects how construction personnel approach their work over the course of a project.



Certification Exam Administration

To facilitate accessibility, exam candidates register for exams through the Green Advantage [website](#). Upon registration, candidates receive a Study Guide and are able to schedule taking the exam electronically. Exam candidates have one year from registration to sit for an exam.

Exams can be taken in one of two ways:

- Electronic format through remote proctoring.** Candidates using this option will test using a personal or desktop computer with an internal or external webcam. Candidates are monitored online during the exam with a live proctor and artificial intelligence. This is the preferred testing option due to the COVID-19 pandemic.

- Paper-pencil format.** For 8 or greater exam candidates, exams can be administered at a location approved by Green Advantage as having adequate lighting, desk space, etc. A Green Advantage proctor is deployed, without additional charge, to ensure that consistent administration rules are followed. Due to the COVID-19 pandemic, this option is rarely used.

To ensure quality testing, a PhD psychometrician provides regular guidance and training, based upon statistical analyses, to subject matter experts (SMEs) to develop and refine exam items, and determine the passing score.

Training in Preparation for Certification Exams

Green Advantage, as a certifying body, does not offer, endorse or authorize trainings in preparation for its exams. However, Green Advantage encourages academic and professional organizations that wish to train Green Advantage Exam candidates to reference the GACP or GACA Study Guide in order to develop curricula and prepare to deliver training.

Although training is not required to sit for the GACP or GACA Exam, it is recommended that candidates take preparatory training. Green Advantage encourages candidates to ensure that the training offers the following:

- Uses training materials that are designed by green experts specifically designed for the Green Advantage Exam
- Taught by qualified and experienced faculty, preferably GACP Certified
- Offered or sponsored by a reputable organization.

For more information about Green Advantage, visit the [website](#), or call 540-822-9449.