

## NARI Green Certified Professional Program Guide

**Welcome**, and congratulations on taking the first step toward earning the Green Certified Professional (GCP) designation. The National Association of the Remodeling Industry (NARI) has established the Green Certified Professional (GCP) designation to promote the highest standards of green remodeling through credentialing of remodeling professionals. By choosing to review this handbook, you have taken the first step toward joining those who will distinguish themselves by earning the GCP.

This handbook summarizes key aspects of the GCP program, and is intended to help you understand the process of certification and recertification when the time comes. The handbook is a useful reference as you:

- Make your decision whether to pursue the GCP
- Develop your course of study to meet the eligibility requirements of the GCP
- Complete the GCP application
- Seek to maintain (or provide yourself another opportunity to earn) the GCP

The GCP program continues to evolve and be refined as the green remodeling industry matures and building science continues to develop. No single printed document can address every potential question, process, policy detail, or future change. You are encouraged to use this handbook as a supplement to the program information provided on the GCP program web site as well as information provided by NARI's certification staff, who may be contacted at 847 298-9200 or [certification@nari.org](mailto:certification@nari.org).

NARI and the NARI Certification Board would like to thank TOTO for their support in developing this certification. TOTO's support has made this very difficult project a reality and has enable NARI to provide a top quality certification designation to remodeling professionals that have been doing it green.

TOTO is the world's largest plumbing fixture manufacturer. A core part of TOTO's global corporate philosophy is to make a contribution to society while at the same time protecting the earth's precious natural resources, especially water. TOTO is vitally involved in advocacy efforts to maximize water efficiency in residential and commercial buildings. As a member of the United States Green Building Council's (USGBC) Water Efficiency Technology Advisory Group, TOTO advises the USGBC on water efficiency issues within its Leadership in Energy and Environmental Design (LEED) green building rating system. A TOTO representative sits on the board of directors of the Alliance for Water Efficiency, a clearinghouse organization started with a grant from the US Environmental Protection Agency overseeing water efficiency issues across the country. TOTO water efficiency specialists were active in an advisory capacity in helping the US EPA to establish plumbing fixture performance testing protocol in its new

## NARI Green Certified Professional Program Guide

WaterSense<sup>SM</sup> water efficiency program. As a result, in part, of its efforts to encourage water efficiency through its water efficient high performance plumbing products and its manufacturing practices, TOTO USA, Inc. in late 2006 earned the first-ever Water Efficiency Leader Industry Award from the US EPA for demonstrating an ethic of water efficiency. TOTO is proud to support and contribute to the efforts of NARI members to create sustainable remodeling and building projects. [www.totousa.com](http://www.totousa.com)

The NARI Certification Board would also like to thank the Green Certification Development Committee for their diligent work in perfecting this program. The committee, lead by Chris Donatelli, CR, CKBR, CLC, worked long hours in establishing the standards and developing the exam for this program. Great Job!

## **The NARI Certification Board**

The NARI Certification Board, the certifying agency of the National Association of the Remodeling Industry, is responsible for the governance of the GCP program, and all policy and standards related to the GCP designation. This program is administered by the NARI staff, which implements the policies. This structure allows the NARI Certification Board to maintain integrity concerning policy matters related to certification.

The NARI Certification Board issues certifications to individuals who successfully meet its standards. These individuals may present themselves to the public as Green Certified Professionals.

## **The 2010 to 2011 NARI Certification Board**

### **Chair**

Art Donnelly, CR, CKBR  
Legacy Builders & Remodelers Corp.  
Mount Sinai, NY

Kevin Anundson, CR, CKBR  
The OAR Group  
Elm Grove, WI

Diane Ausavich, CR  
Carl Krueger Construction  
Milwaukee, WI

H. Dale Contant, CR  
Atlanta Design Build  
Marietta, GA

Judy Mozen, CR  
Handcrafted Homes, Inc.  
Roswell, GA

Sonia Santos, CR  
Don Van Cura Construction, Inc.  
Chicago, IL

Anthony Tripp, CR, CKBR, CLC  
Tripp Builders, Inc  
Chicago, IL

**What is the purpose of the GCP designation?**

The purpose of the GCP certification program is to:

- Establish the body of knowledge for Green Remodeling Professionals
- Assess the level of knowledge demonstrated by Green Remodeling Professionals in a valid and reliable manner
- Encourage professional growth in the field of green remodeling
- Formally recognize individuals who meet the requirements set by the NARI Certification Board
- Serve the public by encouraging quality green remodeling practices

The NARI Certification Board, with assistance and advice from professionals in relevant fields, has attempted to develop a credential that will recognize an accepted level of expertise in the profession with the goal of improving professional standards in green remodeling; however, no certification program can guarantee professional competence. In addition, given the frequent changes in recommended practice and technology, the NARI Certification Board cannot warrant that the test materials will, at all times, reflect the most current state of the art. The NARI Certification Board welcomes constructive comments and suggestions from the public and profession.

**What are the benefits of certification?**

|   |  |
|---|--|
| <p>The benefits of certification for green remodeling professionals include:</p> <ul style="list-style-type: none"><li>• Verification of your knowledge by an independent organization – a way to prove that you have the knowledge needed for the job</li><li>• Professional growth and development</li><li>• Enhanced job opportunities</li></ul> | <p>The benefits of certification for employers include:</p> <ul style="list-style-type: none"><li>• Increased productivity</li><li>• Less training time needed to bring employees “up to speed”</li><li>• Competitive advantage in promoting services to clients</li></ul> |
|---|--|

## **GETTING READY FOR THE TEST**

### **Who can take the test?**

You are eligible to sit for the GCP exam if you meet the following requirements:

- Are employed by or own a firm engaged in commercial or residential green remodeling or a firm that is supporting the green remodeling industry
- Have a minimum of five years continuous full time experience in the remodeling industry
- Have completed 16 hours of education addressing green or sustaining building and/or remodeling principles within the last five (5) years or be enrolled in NARI's Green Remodeling course.
- Sign an attestation to uphold NARI's Code of Ethics

All experience must be completed at the time the application is submitted.

### **How much does it cost?**

The certification fee of \$650 (\$550 without study materials) for a NARI member/\$850 (\$750 without study materials) for nonmembers must accompany the application. The GCP application documents your qualifying experience, technical competence, professional development activities, and attestation to uphold NARI's Code of Ethics. All experience and coursework must be completed at the time the application is submitted, which is generally one month prior to the exam date.

A nonrefundable fee of \$125 is included in the application fee. This \$125 charge is incurred upon receipt of your application by NARI. If for some reason you fail to meet the eligibility requirements at the time of application, your application and documentation will be returned to you. Your fee will be refunded, less the \$125 nonrefundable portion.

### **How do I apply?**

You must complete the current Green Certified Professional application for the GCP program. You should allow at least ten (10) days for delivery if using first class mail. Applications received less than 30 days before your scheduled exam will be rejected and your fee will be refunded less the \$125 nonrefundable portion.

When your application has been reviewed and accepted, you will receive an acknowledgement and your name will be entered on the roster of eligible candidates. Successful applicants are qualified to take the exam once during the next 24 months. If unsuccessful on the first attempt, subsequent examinations take within this 2-year window are subject to a retest fee of \$50 per test. If you

are not successful at passing the exam within two (2) years of your application date and wish to sit for the exam you will be required to resubmit an application and required certification fee in effect at the time of reapplication.

### **When and where is the test given?**

The GCP exam is typically conducted yearly at participating NARI Chapters. Depending on demand and availability, tests may be given in conjunction with the Remodeling Show, which is typically held each October, and the JLC Live trade shows held regionally. Chapters and trade shows may charge a proctor fee to administer the exam. Visit [www.nari.org/certify](http://www.nari.org/certify) for the latest information on test locations. Please note that all examination sites are subject to the availability of facilities and minimum enrollment numbers.

### **How are special testing arrangements made?**

The NARI Certification Board will make reasonable efforts to accommodate eligible candidates, who provide documented evidence of their disability or need for special arrangements, with auxiliary aids, and services that do not present an undue burden to the NARI Certification Board and do not fundamentally alter the measurement of the knowledge the exam is intended to test. If you require special testing arrangements, formal written requests and documentation are required. Documentation should be in the form of a letter on the official letterhead of a licensed or certified professional qualified to diagnose and treat special conditions. A description of the special accommodation(s) requested should be included. Your request, with the documentation, will be reviewed to determine if the accommodation will be granted. If approved, you and your exam proctor will be notified.

### **What is the format for the test?**

The exam is offered in a single, four-hour session. The test will have between 170 and 200 multiple-choice questions. Each question will have four or five options or choices, only one of which is the correct or best answer. You will be asked to select the correct or best answer from these options. You will take the exam in one 4-hour period.

### **What do I need to know for the test?**

The exam content outline organizes the knowledge and tasks deemed essential to green remodeling into fifteen areas.

**The GCP exam content outline.**

The composition of the exam is guided by research on the job tasks performed and knowledge needed by green remodelers.

On the following pages list the exam sections and the approximate percentage of the exam devoted to each one.

**Building Science**

**14 to 16%**

- Define the term “Building Science” as it relates to Green Remodeling.
- Define the terms associated with building science.
- Describe what is important to the homeowner in terms of building science and its application.
- Describe the flows of heat, air, and moisture through the home and the various methods used to control them.
- Describe what is meant by the phrase “the house as a system” as it relates to the evaluation of prospective remodeling projects.
- Describe the major climate zones in the United States and the factors used to define each.
- Describe the environment’s impact on the home and its occupants for their climate zone.
- Determine the appropriate building practices based on climate zone.
- Describe the trade-offs in getting the biggest bang for your clients’ remodeling buck.
- Describe the process of “testing in/testing out” as it relates to building science and remodeling projects.

**Indoor Air Quality**

**11 to 13%**

- Describe the various chemicals present in the indoor environment and the hazards they may represent.
- Describe the methods used to reduce harmful chemicals as part of the remodeling project.
- Identify the IAQ issues presented by various building products common in remodeling projects.
- Identify the IAQ hazards presented by an attached garage and describe the processes used to reduce them.
- Describe the common health effects of mold.
- Describe the processes that can reduce or eliminate mold.
- Describe the sources of moisture failures.
- Describe the process used during remodeling to minimize the IAQ issues at the completion of the remodeling project.

**Deconstruction vs. Demolition**

**2 to 3%**

## NARI Green Certified Professional Program Guide

- Define deconstruction
- Explain the benefits of deconstruction
- Explain how to reduce waste on site
- Describe the steps for preparing to salvage a job site
- Give examples on how and what can be reused and recycled
- Explain when not to reuse materials

### **Foundations**

**2 to 3%**

- Describe the design considerations required of foundations and basements including:
  - Insulation requirements
  - Moisture control
  - Radon control
  - Seal vs. ventilation of crawl spaces
- Describe the measures that should be used to minimize foundation cracking.
- List and describe the use of materials that are environmentally friendly and can be used in concrete foundations.
- Describe the maintenance actions that will enhance the long-term sustainability of foundations and basements.

### **Framing**

**11 to 13%**

- Describe the design consideration/techniques that may be employed to reduce the amount of wood used to build a structure including the pros and cons of each.
- Describe the relationship between wood reduction and increased insulation
- Describe the on-site actions that can be employed to reduce the amount of waste sent to the landfill, including the following:
  - Re-claim lumber for non-structural members
  - Recycle waste
  - Measure twice, cut once
- Describe the actions that impact the comfort of the home over the long term including:
  - Sealing sills at all exterior walls
  - Seal all penetration through framing
  - Spray framing with Borate for pest control

### **Roofing**

**2 to 3%**

## NARI Green Certified Professional Program Guide

- Describe the green roofing products available to the remodeler in designing and building roof systems including:
  - Recyclable roofing products
  - Cool roofs
  - Fiber cement roofing products
  - Green roofs (live roof products)
  - Radiant barrier sheathing
- Describe the factors that impact roof durability
- Describe the factors that must be considered when adding or using the following to a roof system:
  - Photovoltaic
  - Solar water heater
- Describe attic ventilation requirements required by code
- Describe the safety precautions that must be followed when roofing.
- Describe the on-site actions that can be employed to ensure the sustainability of the roof system.

### **Insulation**

**6 to 8%**

- Define the terms associated with insulation and the insulating process
- List the various types of insulation products and compare their relative merits based on insulating ability, product application, and environmental impact.
- Describe the factors that should be considered when evaluating the environmental impact of insulation products.
- Describe the impact air leakage has on the efficiency of insulation.
- Describe the method used to prevent or correct air leakage issues.
- Describe the actions taken during remodeling that will reduce or eliminate air leakage.

### **Heating, Ventilation, and Air Conditioning (HVAC)**

**6 to 8%**

- Define the terms SEER and AFU.
- Describe the various HVAC systems and the positive/negative environmental impacts of each.
- Discuss the environmental cost of low efficiency HVAC systems.
- Determine the life cycle cost of HVAC equipment in relation to upgrading from low efficiency to high efficiency systems.
- Discuss the importance of proper ventilation duct design and installation
- Explain the importance of providing adequate make-up air to combustion equipment.
- Describe the benefits of sealed combustion units.
- Explain the proper venting for ranges, range hoods, and bathroom fans.
- Describe the actions required to maintain the operations of high efficiency HVAC equipment.

## NARI Green Certified Professional Program Guide

- GeoThermal why's and how's

### **Electrical**

**2 to 4%**

- Describe the return on investment that the client may see by converting to energy efficient products.
- Describe the techniques used to exploit daylight in lighting the house.
- Describe the optimum products used for electrical lighting and lighting control and compare and contrast the options.
- Explain how Energy Star rated appliances can help conserve energy.
- Describe the various on-site processes that can be employed to ensure optimum energy savings.

### **Renewable Energy**

**8 to 12%**

- Describe the design issues related to renewable energy and green remodeling.
- Explain the basic concepts of passive solar heating and cooling and how to incorporate into the remodeling project
- Select the proper window based on the project's orientation, expected heating and cooling loads, and any other pertinent information.
- Select the appropriate roof overhang based on project location, orientation, and desired passive solar heating/cooling effects.
- Describe the rating system used on most windows (NFRC) and discuss the importance of an Energy Star rating.
- Describe the design consideration of installing a solar system (active and passive) as part of a Green Remodeling Project.
- Describe the on-site considerations used when constructing a Green Remodeling project that contains either a passive or active solar energy system.
- Describe the maintenance and sustainability issues that must be considered as a part of an active or passive solar energy system.

### **Appliances**

**4 to 6%**

- Describe the impact that appliances have on the overall energy and water use of the house.
- Compare and contrast Energy Star rated appliances with non-Energy Star rated appliances, including initial cost, environmental impact, and life cycle costs.
- Compare and contrast horizontal-axis vs. vertical-axis washing machines.
- Discuss the expected benefits of a central vacuum system.

### **Plumbing**

**4 to 6%**

- Discuss the environmental issues related to water, its overuse, and its contamination.

## NARI Green Certified Professional Program Guide

- Distinguish between high performance plumbing fixtures and those that are not through the use of objective third party testing and reports.
- List the alternatives to copper piping used for the water supply system and DWV systems.
- Describe the design considerations that should be applied to the plumbing systems of a Green Remodeling project.
- Describe the processes and techniques that must be applied when installing the plumbing systems of a Green Remodeling project.
- Describe the maintenance and sustainable features that should be part of the plumbing system of every Green Remodeling Project.
- Explain hot water delivery system design.

### **Exterior Finishes**

**4 to 6%**

- Describe the design considerations to employ when selecting or specifying exterior finishes for a Green remodeling project.
- Compare and contrast the various materials available for use as an exterior finish, including environmental impact, sustainability, and initial cost vs. long-term costs.
- Describe the construction procedures that should be followed when installing exterior finishes and siding on a Green remodeling project.
- Describe the maintenance and sustainability features that should be part of the exterior of every Green Remodeling project.
- Discuss the drainage plan.

### **Interior Materials/Finishes**

**2 to 4%**

- Describe the environmental impact of interior materials and finishes associated with a typical remodeling project.
- List the Green Products that may be used for flooring on a Green Remodeling project.
- Describe the strategies that should be employed when designing and constructing the interior of a Green Remodeling project. Include as a minimum the following:
  - Use of Formaldehyde-free materials
  - Floor materials
  - Cabinets and finishes
  - Paints and wood finishes
  - Adhesives
- Discuss moisture resistant materials used in wet and damp areas.

### **Exterior Site Development (Landscape)**

**4 to 6%**

## NARI Green Certified Professional Program Guide

- Describe the design considerations to be employed when integrating landscaping into a Green Remodeling Project including discussions of:
  - Saving energy
  - Saving water
  - Considering the four seasons
  - Work site considerations
    - Describe the job site process/procedures that can be employed to recycle construction and demolition waste.
    - Describe the benefits of recycling construction and demolition waste on the environment and money saved.
    - Describe the process/procedures required to maintain the landscape in an environmentally friendly way.

### **Marketing**

**2 to 4%**

- Integrate Green Remodeling into your current marketing activities.
- Describe the “Talking Points” that can be used when describing Green Remodeling to your clients.
- Define your target market for Green Remodeling.

### **How do I prepare for the test?**

The NARI Certification Board offers the following suggestions for preparing for the test:

Review the test content outline and ask yourself the following questions:

- Do I have a good understanding of the content area?
- Do I use from knowledge this area regularly at work?

Plan your studying based on your answers to these questions. For example, for content areas of which you have a good understanding and use every day, you may only need to do a quick review to prepare for the test, whereas for areas with which you are less familiar, you may decide that you need more in-depth study or training before taking the test.

When planning your studying, you should also think about what percentage of the test questions will cover each major content area. If you are not very familiar with content area that will comprise a significant proportion of the exam, you probably should spend some additional time studying that area.

Decide which resources will better help you prepare for the test. The references listed in the authoritative literature below may be helpful when you are reviewing the content areas included on the test.

You may choose to study on your own or you may decide to join a study group at your local chapter to gain a better understanding of one or more content areas.

## The GCP Authoritative Literature

The following is the GCP Authoritative Literature, a list of references that may be helpful in review for the test. The list is intended for use as a study aid only. The NARI Certification Board does not intend the list to imply endorsement of these specific references, nor are the test questions necessarily limited to these sources. The NARI Certification Board reviews the Authoritative Literature on a biannual basis. This list was updated in January 2007.

## Green Certified Professional (GCP) References by Knowledge Area

**General References:** as appropriate to your climate

- *Builders Guide to Hot-Humid Climates* by Joseph Lstiburek
- *Builders Guide to Hot-Dry & Mixed-Dry Climates* by Joseph Lstiburek
- *Builders Guide to Mixed-Humid Climates* by Joseph Lstiburek
- *Builders Guide to Cold Climates* by Joseph Lstiburek

### Building Science

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Chapter 4
- *Residential Energy*, by John Krigger and Chris Dorsi; Chapter 1. to page 40, Chapter 2. pages 49-53, 56-65, 67-72, Chapter 3. all and Chapter 10. pages 239-244
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies** AE51 thru 54 and 63, 64, 66, and 68  
**Project** – Home Performance pages 31 thru 36

### Indoor Air Quality

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Pages 111-128 and Chapter 16
- *Residential Energy*, by John Krigger and Chris Dorsi; Chapter 6 pages 146-151, and Chapter 10 pages 235-239, 244-250
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies:** EA 51 thru 54, 63, 64, 66, and 68  
**Project** – Home Performance pages 31 thru 36

### Deconstruction vs. Demolition

- *Green Remodeling – Changing the World One Room at a Time*, by David Johnston and Kim Master; Pages 17-18, 96-97, 177-178
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies:** MR 107 thru 108, 133, 135, and 140 thru 142

**Project** – Gut Rehab pages 43 thru 48

**Foundations**

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Pages 185-189
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies:** IDP 19 thru 22, AE 47, ME 114, 115 and IEQ 163, 164  
**Project** – Major Addition pages 37 thru 42

**Framing**

- *Green Remodeling – Changing the World One Room at a Time*, by David Johnston and Kim Master; Pages 98-106 and Chapter 9
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies:** MR 107, 116, 118, 121, and 128  
**Project** – Major Addition pages 37 thru 42

**Roofing**

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Chapter 11
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies:** IDP 27, EA 61, 100, 101, 102, and MR 120
- DOE Fact sheet- [Radiant Barriers](#)

**Insulation**

- *Green Remodeling: Changing the World One Room at a Time*-by David Johnston and Kim Master; Pages 120-121 and Chapter 14
- *Residential Energy*, by John Krigger and Chris Dorsi; Chapter 4 all
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies:** IDP 2, 3, 24, 25, EA 45, 47, 49, 50, 55, and MR 117  
**Project** – Deep Energy Retrofit pages 49 thru 54

**Heating, Ventilation, and Air Conditioning (HVAC)**

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Pages 111-128 and Chapter 16
- *Residential Energy*, by John Krigger and Chris Dorsi; Chapter 6 and Chapter 8
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC

## NARI Green Certified Professional Program Guide

**Strategies:** IDP 3, 5, AE 48, 63 thru 76, IEQ 166 thru 174

**Project** – Gut Rehab pages 43 thru 48

### Electrical

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Chapter 13
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC

**Strategies:** EA 83 thru 90 and 98 thru 102, MR 121, and IEQ 177, 178

**Project** – Living and Working pages 19 thru 24

### Renewable Energy

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Chapter 5 and Chapter 15
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC

**Strategies:** IDP 3, SS 30, 31, 36, EA 45, 48, 56, 58 thru 62, 88, 98, 100, 101, and 102

**Project** – Deep Energy Retrofit pages 49 thru 54

- *Residential Energy* by John Krigger and Chris Dorsi  
Chapter 5 and page 281

### Appliances

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Page 145 and Chapter 18
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC

**Strategies:** EA 92 thru 99

**Project** – Kitchen pages 3 thru 6

- *Residential Energy* by John Krigger and Chris Dorsi  
Chapter 7 and 9 and pages 91 thru 195

### Plumbing

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Pages 106-111, 135-136, and 142-143, and Chapter 12
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC

**Strategies:** IDP 6, 7, WE 41 thru 44, EA 77 thru 82, MR 122 thru 125, and IEQ 175, 176

## NARI Green Certified Professional Program Guide

### **Project** – Bathroom pages 7 thru 12

- *Residential Energy* by John Krigger and Chris Dorsi  
Chapter 9

### **Exterior Finishes**

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Chapter 10
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies:** IDP 1, 6, 9, EA 62, ME 118, 119, 130

### **Interior Materials/Finishes**

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Pages 119-127, and Chapter 19
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies:** IDP 6, WE 41 thru 44, MR 119, 121, 126 thru 1154, IEQ 179 thru 187  
**Project** – Bead Room Remodel pages 13 thru 18

### **Exterior Site Development (Landscape)**

- *Green Remodeling: Changing the World One Room at a Time*, by David Johnston and Kim Master; Pages 106-110 and Chapter 7
- *REGREEN Residential Remodeling Guidelines*. ASID and USGBC  
**Strategies:** IDP 6, 7, 9, 13 thru 18, SS 29 thru 39, WE 40, MR 109 thru 113, 154  
**Project** – Outdoor Living pages 55 thru 60

## **TAKING THE TEST**

### **What are the requirements during the test?**

You should arrive at the testing site approximately thirty (30) minutes to one (1) hour prior to the test to allow sufficient time for you to check-in and locate your seat. Late arrivals cannot be admitted to the test. Be prepared to provide a photo ID to the test administrator as part of the registration process.

You may not use devices with memory capabilities. Audible beepers, cellular phones, books, or papers will not be allowed in the testing room. Note taking is prohibited during the test. Paper for conducting calculations will be provided by the test administrator and will be collected at the completion of the exam period.

## NARI Green Certified Professional Program Guide

Unauthorized visitors will not be allowed at the test site. Observers approved by the NARI Certification Board may, however, be present during the testing session.

Only water will be allowed in the testing room. All other materials, food, and beverages are prohibited.

Before you take the exam, you will be asked to sign the following statement: "Due to the confidential nature of this test, I agree that I will not copy or retain test questions or transmit them in any form to any other person or organization." If you do not sign this statement, you will be dismissed from the testing center or your test results may be invalidated. The theft or attempted theft of the test or copying or disclosure of test questions is punishable by law.

### Sample Examination Questions

The GCP examination is a knowledge-based, paper-and-pencil examination consisting of between 170 and 200 multiple-choice questions administered in a single four-hour period. The following questions have been selected for inclusion in candidate materials as sample questions. While these sample questions are intended to give candidates a better sense of the GCP questions, the actual examination may include these and other similar types of questions in varying proportions. The answers to these sample questions are given on the last page of this handbook.

1. Energy Star qualified refrigerator models use \_\_\_\_\_ to improve energy efficiency.
  - 1) high efficiency compressors
  - 2) high efficiency refrigerate
  - 3) tighter door seals
  - 4) improved insulation
  - 5) more precise temperature and defrost mechanisms
  - a. 1, 3, and 5
  - b. 2, 4, and 5
  - c. 2, 3, and 4
  - d. 1, 4, and 5
  
2. A mature evergreen wind break reduces wind by \_\_\_\_\_ and energy use in the house \_\_\_\_\_.
  - a. 10-50%, is reduced by 35%
  - b. 50%, is reduced by 10%-50%
  - c. 80%, is reduced by 55%
  - d. 50%, remains the same

## NARI Green Certified Professional Program Guide

3. Which of the following is an example of or defines heat transfer by **conduction**?
  - a. Heat transferred through solid objects and between objects touching one another.
  - b. Heat transferred by a moving fluid like air or water.
  - c. Heat that flies through space from one object to another
  
4. Remodeling projects can generate between \_\_\_\_\_ and \_\_\_\_\_ pounds of waste per square foot.
  - a. 3, 5
  - b. 50, 60
  - c. 70, 115
  - d. 90, 130
  
5. Using a motion sensing switch in a low use area \_\_\_\_\_.
  - a. is handy if your hands are full
  - b. has no impact on energy use
  - c. is very expensive in relation to the energy saved
  - d. is very effective in saving electricity
  
6. When building a deck, which of the following materials would be the greenest choice to use?
  - a. Local harvested lumber
  - b. FSC certified lumber
  - c. Post consumer composite decking
  - d. PVC decking
  
7. What type of concrete form material can be left in place after the foundation or wall has been placed?
  - a. Aluminum forms
  - b. Treated wood forms
  - c. Rigid foam insulated forms
  - d. Steel forms
  
8. Metal studs contain up to \_\_\_\_\_ recycled content.
  - a. 23%
  - b. 59%
  - c. 78%
  - d. 95%
  
9. A HEPA filter will eliminate which of the following?
  - a. Gaseous toxins

## NARI Green Certified Professional Program Guide

- b. Airborne particulates
  - c. Volatile organic compounds
  - d. Radon
10. Which of the following is the preferred product for use in sealing joints in duct work?
- a. Cloth tape
  - b. Fiberglass insulation
  - c. Duct tape
  - d. Mastic
11. Typical fiberglass insulation uses \_\_\_\_\_ to make the batt expand into wall cavities and contains tiny respirable \_\_\_\_\_ particles.
- a. phenol, fiber
  - b. urea, dust
  - c. formaldehyde, glass
  - d. carbon dioxide, glass
12. Your client desires a wood floor but wants to ensure the project remains true to green principles. Which of the following materials should be recommended?
- 1. Bamboo
  - 2. Cork
  - 3. Poplar
  - 4. FSC-certified oak
  - 5. Non-certified mahogany
- a. 1, 2, and 4
  - b. 2, 3, and 5
  - c. 3, 4, and 4
  - d. 1, 3, and 4
13. Replacing a showerhead with a low flow showerhead can save about \_\_\_\_\_ per year depending on where the home is located.
- a. \$5 - \$10
  - b. \$40 - \$50
  - c. \$100 - \$200
  - d. \$150 - \$300
14. A thermal chimney employs \_\_\_\_\_ to draw air out of a building.
- a. convective currents
  - b. conductive currents
  - c. cold air flow
  - d. warm air flow
15. For a radiant barrier to be effective there must be \_\_\_\_\_ between the roof deck and the surface of the barrier.

## NARI Green Certified Professional Program Guide

- a. 2 inches
- b. 6 inches
- c. 1 foot
- d. 2 feet

### **What information will I receive about my score?**

The test is designed to distinguish those who have the basic level of knowledge from those who do not. There is no evidence that someone who receives a very high score on the test will perform significantly better on the job than someone whose score falls exactly at the passing point. Therefore, if you pass the test, you will be informed only that you have successfully completed the credentialing process. You will NOT be notified of your actual score. Your completed exam will not be returned to you for review or comment.

If you do not achieve a passing score, you will be notified of your score and the minimum score required to pass, and will receive a diagnostic report showing your performance in each content area. This information is provided to assist you in deciding whether to retake the test and how to plan your study efforts for future tests.

### **When will I receive my test results?**

GCP test results will be mailed approximately four (4) weeks after the exam. You may elect to receive notification via e-mail by completing the appropriate form at the time you take the exam. To protect the confidentiality of your test score, no results will be given over the telephone. Results will not be released to any third party without your specific written permission. Forms will be available on the day of the exam or they may be requested from [certification@nari.com](mailto:certification@nari.com).

### **Request for re-scoring**

If you do not achieve a passing score on the exam, you may ask that your test be rescored to verify the reported score. Request must be in writing and must be accompanied by a payment in the amount of \$50, made payable to NARI. Request for hand scoring can be honored only up to 30 days after distribution of the results.

### **Retaking the test**

There is a limit of two times that you may apply for and re-take the test within two years of your original examination date. If you do not succeed in passing the test by the second anniversary of your original examination date you will be required to submit a new application form, fees, and meet all eligibility requirements in effect at the time of the application. There is a \$50 fee each time you retake the GCP exam.

## **Appeals**

Within 20 business days after announcement of the results of the GCP examination, unsuccessful candidates may file an appeal of their score with the NARI Certification Board on the basis of alleged inappropriate exam administration procedures or testing conditions severe enough to cause a major disruption of the examination process. No one other than the candidate may make the appeal. The NARI Certification Board shall respond to the candidate within 60 days of receiving the appeal.

## **Nondiscrimination policy**

The NARI Certification Board does not discriminate against any person on the basis of age, gender, sexual orientation, race, religion, national origin, medical condition, physical disability, or marital status.

## **Answers to sample questions**

1. D
2. B
3. A
4. C
5. D
6. C
7. C
8. D
9. B
10. D
11. C
12. A
13. B
14. A
15. A