

**NRMCA Pervious Concrete Contactor Certification  
Policies and Procedures Manual**

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**NRMCA Pervious Concrete Contractor Certification**  
**Policies and Procedures Manual**  
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## **NRMCA Pervious Concrete Contractor Certification Program Summary**

### **Certification Levels**

NRMCA Pervious Concrete Contractor Certification levels include:

- 1. Technician**
- 2. Installer**
- 3. Craftsman**

### **Definitions**

A Pervious Concrete **Technician** is a person who demonstrated knowledge by successful completion of a written exam about proper procedures to place, compact, finish, edge, joint, cure and protect pervious concrete pavements, but who lacks the requisite field experience to qualify as a pervious concrete Installer or Craftsman.

The Technician level is intended for contractor and non contractor personnel in learning the proper techniques of installing pervious concrete. It is assumed that contractor personnel who are certified as technicians will be supervised by an individual with a higher level of certification and they will upgrade to the higher levels when they achieve the work experience criteria for Installer and Craftsman levels to qualify to install pervious without supervision. This level is also intended for any non-contractor persons such as ready mixed concrete personnel, testing labs, inspectors, admixture personnel, specifiers and engineers that need to understand the pervious concrete system. This certification level is also recommended for individuals who are knowledgeable about pervious concrete who intend to participate in training programs for local sponsoring groups.

A Pervious Concrete **Installer** is a person who has demonstrated the ability to place, compact, finish, edge, joint, cure and protect pervious concrete pavements and has documented a limited project-based field experience in placing pervious concrete.

The Installer level is intended for contractor personnel who have achieved this intermediate level of certification by completing installation of work as indicated by the certification criteria. Installers are expected to assume leadership roles when installing pervious concrete and make decisions on placement conditions and procedures. It is anticipated that contractor personnel will upgrade to Craftsman level when they achieve the work experience criteria for that level.

A Pervious Concrete **Craftsman** is a person who has demonstrated the ability to place, compact, finish, edge, joint, cure and protect pervious concrete pavements and has documented a higher level of field time-based experience in placing pervious concrete.

The Craftsman level is intended for contractor personnel who have achieved this highest level of certification by completing the work experience as indicated by the certification criteria. Craftsman are expected to lead an installing crew, work with the concrete supplier to ensure the mixture is appropriate for the installation, designate duties and assignments to the crew, evaluate site and placement conditions and make decisions when the pour needs to be stopped or re-scheduled.

Specific certification criteria are provided in the Certification Policy.

Recertification is required every five (5) years as stated in the Certification Policy.

### **Body of Knowledge**

The essential body of knowledge deemed necessary to meet the minimum requirements of pervious concrete certification is contained in:

**NRMCA Publication #2PPCRT: Text Reference: Pervious Concrete Contractor Certification.**

The certification requires knowledge in the following areas of concrete construction:

1. Basic concrete technology
2. General applications and benefits offered by pervious concrete pavements

3. Pervious concrete materials and mix proportioning
4. Proper use of tools and equipment
5. General design principles of pervious concrete pavements
6. Pervious concrete construction
7. Maintenance and troubleshooting

**Pricing (for Local Sponsoring Groups)**

\$45.00 (list \$60) for the Pervious Concrete Contractor Certification textbook.

\$90.00 Written Examination

\$25 Installer Application

\$25 Craftsman Application

\$25.00 Expedited fee per exam (results within five business days)

\$25.00 processing fee plus postage for materials being shipped overnight

## **NRMCA Pervious Concrete Contractor Certification Certification Policy**

### **1 CERTIFICATION CRITERIA**

- 1.1 The National Ready Mixed Concrete Association (NRMCA) Pervious Concrete Contractor certification program includes certification of personnel at the following levels
  - A. Pervious Concrete Technician
  - B. Pervious Concrete Installer
  - C. Pervious Concrete Craftsman
- 1.2 Personnel achieving the following criteria will obtain certification as a **Pervious Concrete Technician**:
  - A. Pass the NRMCA Pervious Concrete Contractor Certification Written Examination with a score of 75% or greater administered by a Local Sponsoring Group approved by NRMCA.
- 1.3 Personnel achieving the following criteria will obtain certification as a **Pervious Concrete Installer**:
  - A. Pass the NRMCA Pervious Concrete Contractor Certification Written Examination with a score of 75% or greater administered by a Local Sponsoring Group approved by NRMCA
  - B. Complete a Performance Evaluation administered by a Local Sponsoring Group approved by NRMCA – Form PCC10
  - C. Provide project experience documentation of successful construction of a minimum of 3 projects with a total area exceeding 10,000 square feet (1000 m<sup>2</sup>) – Form PCC8
- 1.4 Personnel achieving the following criteria will obtain certification as a **Pervious Concrete Craftsman**:
  - A. Pass the NRMCA Pervious Concrete Contractor Certification Written Examination with a score of 75% or greater administered by a Local Sponsoring Group approved by NRMCA
  - B. Possess a current ACI Flatwork Finisher Technician or Craftsman certification at the time of application
  - C. Work Experience:
    - a. **OPTION A:** Complete a Performance Evaluation administered by a Local Sponsoring Group approved by NRMCA and documented work experience constructing pervious concrete pavement exceeding 1500 hours – Forms PCC10 and PCC9, respectively
    - OR**
    - b. **OPTION B:** Provide documentation of work experience constructing pervious concrete pavements exceeding 3000 hours – Form PCC9.
    - c. Work experience shall be documented in hours and square footage on a standard spreadsheet. Documentation shall include project and contact, preferably an owner, who can verify the conduct of the work. The craftsman applicant shall document a minimum of 3 problems they have had on pervious concrete jobs and how they resolved these problems. The craftsman application shall be reviewed and approved by a minimum of 3 member certification committee established by the local sponsoring group.
- 1.5 NRMCA Pervious Concrete Contractor Certifications shall be valid for a period of five [5] years. The expiration date for the certification shall be based on the date of completion of the written examination.
- 1.6 A Certified Pervious Concrete Technician may upgrade to Certified Pervious Concrete Installer at any time during the five [5] year certification period by completing the current Installer certification criteria.
- 1.7 A Certified Pervious Concrete Technician or Installer may upgrade to Certified Pervious Concrete Craftsman at any time during the five [5] year certification period by completing the current Craftsman certification criteria.

- 1.8 If a Technician upgrades to Installer or Craftsman status, certification as Installer or Craftsman shall be valid for the remainder of the original Technician certification period – five [5] years from the date of the written examination.
- 1.9 If an Installer upgrades to Craftsman status, certification as Craftsman shall be valid for the remainder of the original Installer certification period – five [5] years from the date of the written examination.
- 1.10 Recertification Criteria – See Section 8.
- 1.11 Certification may be revoked for cause including but not limited to:
  - A. Falsifying information on application
  - B. Cheating on written examination or performance evaluation
  - C. Misrepresenting certification
  - D. Lapsing of certification requirements
- 1.12 Applicant must sign an ethics clause before taking the written examination which states:
  - A. I HEREBY PLEDGE that as a candidate for **Pervious Concrete Contractor Certification (either Technician, Installer or Craftsman)**, that I understand the certification criteria and will maintain the ethical and professional integrity of the certification program should I become certified by meeting the certification criteria. I will immediately withdraw my certification if during the 5-year certification period I discover that I no longer meet the certification criteria for whatever reason. I understand that NRMCA may revoke my certification if it discovers that I no longer meet the certification criteria.

## **2 EXAMINATION CRITERIA**

- 2.1 The content of the written examination and performance evaluation shall be derived directly from NRMCA Publication 2PPCRT, *Text Reference: Pervious Concrete Contractor Certification*.
- 2.2 There will be questions regarding pervious concrete technology on the written examination. Additionally, the examinee will be expected to have a basic knowledge of proper procedures for pervious concrete.
- 2.3 The examination(s) shall be administered through NRMCA-approved Local Sponsoring Groups by NRMCA approved examiner, proctors, and/or supplemental examiners as applicable.
- 2.4 The NRMCA approved examiners, proctors, supplemental examiners, and/or Local Sponsoring Groups shall not have any jurisdiction over the content of the examination(s) or evaluation(s), or over the grading of the written examination.
- 2.5 Both the written examination and performance evaluation are closed book. Notes or other technical material shall not be permitted in the examination and evaluation area. The examinee will be provided an opportunity to review the items included in the performance evaluation checklist prior to the evaluation.
  - A. Applicants for certification are encouraged to engage in training and/or study the Text Reference in advance of taking the written examination or performance evaluation, however, the applicant is not required to do so.

### **WRITTEN EXAMINATION**

- 2.6 The written examination shall consist of at least sixty [60] multiple choice and/or true/false questions. The written examination is based on the material found in NRMCA Publication 2PPCRT.
- 2.7 A maximum of two hours shall be permitted for completion of the written examination.
- 2.8 Oral administration of the written examination shall be permitted, contingent upon approval by the Examiner.

- 2.9 The passing grade of the written examination shall require a score of 75% or greater.

### **PERFORMANCE EVALUATION**

- 2.10 The performance examination is based on the material in NRMCA Publication 2PPCRT.
- 2.11 The performance evaluation of the examinee can be conducted at an organized mock-up or demonstration placement or at an actual project site and shall be administered by approved examiner or supplemental examiner.
- 2.12 The examinee must place, compact, edge, joint and begin curing a pervious concrete slab in the direct presence of the examiner or supplemental examiner.
- 2.13 The examinee's performance shall be evaluated based on the criteria of the performance evaluation checklist (Form PCC10).
- 2.14 The examiner/supplemental examiner shall record the symbols 'P' for passing and 'F' for failing on each step of the checklist.
- 2.15 A passing grade is defined as: no significant variation from proper procedure and no more than 2 variations from proper technique in the execution of the listed finishing operations.
- 2.16 The performance evaluation must be successfully completed according to the aforementioned criteria.
- 2.17 Immediately following completion of the performance evaluation, the examiner/supplemental examiner shall inform the examinee of the results, either pass or fail.
- 2.18 If the first trial was not successfully completed, a second trial shall be allowed after each other examinee has had a turn.
- 2.19 Examinees who fail a second trial, may arrange with the examiner to take the performance evaluation on another day.

### **PROJECT EXPERIENCE AND WORK EXPERIENCE**

- 2.20 Applicant for Installer certification shall complete Form PCC8 and submit it to the principal of the Local Sponsoring Group. Project experience (Installer applicant) shall be verified and signed by the primary contact of the Local Sponsoring Group under which the applicant is applying for certification.
- 2.21 Applicants for Craftsman certification shall complete Form PCC9 and submit it to the principal of the Local Sponsoring Group. Work experience (Craftsman applicant) and additional statements shall be completed on a standard spreadsheet. The work experience and project information shall be evaluated and signed off by a 3-member certification committee of the Local Sponsoring Group. The application shall be signed by the primary contact of the Local Sponsoring Group under which the applicant is applying for certification. All documentation, including the completed spreadsheet, shall be forwarded to NRMCA with the application.
- 2.22 NRMCA reserves the right to verify submitted documentation of any applicant.

### **3 REEXAMINATION CRITERIA**

- 3.1 Failure of the written examination shall require a reexamination on the entire written examination.
- 3.2 Failure of the performance evaluation shall require reexamination on the performance evaluation in its entirety.

### **4 APPEALS CRITERIA**

- 4.1 All appeals by applicants shall be directed initially to the examiner.
- 4.2 In the event that the applicant is not satisfied with the decision of the examiner regarding an appeal, the applicant may pursue an appeal with Local Sponsoring Group Certification Committee.

- 4.3 In the event that the applicant is not satisfied with the decision of the Local Sponsoring Group Certification Committee, the applicant may pursue an appeal with the NRMCA Pervious Concrete Contractor Certification Committee. All appeals shall be submitted, in writing, to the NRMCA Certification Department within sixty (60) days after being notified by the Local Sponsoring Group Certification Committee of their decision. All appeals shall be handled in order as follows:
- A. A 3-member review panel composed of one NRMCA staff representative and members of the NRMCA Pervious Concrete Contractor Certification Committee shall review the appeal. Within sixty (60) days after receiving the appeal, NRMCA shall acknowledge receipt of all appeals and notify the appellant, in writing as to:
    - a. how the appeal will be reviewed by the review panel (i.e., meeting, letter ballot, telephone conference, etc.) and
    - b. when a decision will be rendered.
  - B. The review panel may at its sole discretion, allow the appellant to personally appear before them to present arguments. Not less than thirty (30) days in advance of the meeting, NRMCA will notify the appellant, in writing, of the date, time and location of the review panel meeting as well as the length of time that will be allotted for presentation and discussion of the appeal. NRMCA shall notify the appellant, in writing, of the review panel's decision within sixty (60) days after the review panel has reached a decision.
  - C. All decisions made by the NRMCA Pervious Concrete Contractor Certification Committee are final.
- 4.4 For the written examination, examinees can challenge individual questions in the provided section of the examination. Challenges on exam questions should be made at the time of writing the exam only. NRMCA will address the challenge and provide credit for the questions if appropriate.

## **5 LOCAL SPONSORING GROUP CRITERIA**

- 5.1 Local Sponsoring Groups shall be approved, in writing, by NRMCA before they will be permitted to conduct an NRMCA certification. In all cases, approval of Local Sponsoring Groups shall be at the sole discretion of NRMCA. NRMCA will preferentially approve state ready mixed concrete associations or other organizations that are affiliates of NRMCA. The Local Sponsoring Group shall apply for approval using NRMCA Form PCC1.
- 5.2 The preferred Local Sponsoring Group shall be a state ready mixed concrete association or other organization that has obtained active and formal "Affiliate" status with NRMCA. The NRMCA Affiliate state ready mixed concrete association or other organization shall have the first rights to exclusively sponsor the Pervious Concrete Contractor Certification program(s). Where no such entity exists, or if an NRMCA Affiliate status changes, a non-Affiliated state ready mixed concrete association will be eligible. In the event that neither entity exists, other related groups such as existing ACI chapters, state concrete promotion groups, or other local or national entities such as ACPA chapters, may petition NRMCA to become an eligible Local Sponsoring Group.
- 5.3 In approving Local Sponsoring Groups, NRMCA will consider, among other factors, the following:
- A. The group(s) shall, to the extent feasible, represent segments of the local industry involved in the production, design, construction and testing/inspection of concrete and concrete products; and/or shall establish a certification committee(s) with such broad representation.
  - B. The group(s) and/or their certification committee(s) shall have the interest, experience and technical expertise necessary to conduct the program(s).
- 5.4 Local Sponsoring Groups shall establish a certification committee to administer the NRMCA certification program(s). The certification committee shall consist of at least three (3) individuals, with at least one working for an organization other than the Local Sponsoring Group. NRMCA shall be notified of the composition of the committee on NRMCA Form PCC2 that shall accompany the Local Sponsoring Group application (Form PCC1).
- 5.5 The certification committee shall obtain the services of an NRMCA-approved examiner(s) to conduct the NRMCA certification Written Examination(s) and Performance Evaluation(s).

- Examiners are permitted to conduct NRMCA certification examinations and evaluations only under the auspices of NRMCA-approved Local Sponsoring Groups; and they must comply with all NRMCA certification policies and procedures.
- 5.6 NRMCA shall assign Local Sponsoring Groups a specific geographical area(s) as per their request within which they will have authority to conduct the NRMCA certification program(s). Approved Local Sponsoring Groups wishing to hold programs in a geographic region covered by another group shall notify the group that has responsibility for that region. In those cases where a Local Sponsoring Group is unable to meet the local demands of their assigned geographical area(s), NRMCA reserves the right to authorize an additional group to meet the needs of that area. NRMCA reserves the right to reassign a previously assigned geographical area when an application is received from a Local Sponsoring Group that can better serve that area.
  - 5.7 NRMCA shall approve each Local Sponsoring Group on a calendar year basis for a period not to exceed five (5) years. At the conclusion of this period, all groups shall reapply to NRMCA for approval to continue to act as an NRMCA Local Sponsoring Group.
  - 5.8 Where no NRMCA Affiliate exists or participates, NRMCA reserves its sole right to select a Local Sponsoring Group(s) who appears to be the most able to serve the interests of NRMCA and the successful implementation of the NRMCA Pervious Concrete Contractor Certification Program.
  - 5.9 Groups wishing to sponsor NRMCA certification program(s) on a "national" or "regional" basis will, in appropriate circumstances, be authorized by NRMCA to conduct examinations and evaluations in a specific geographic area(s) on a "case-by-case" basis. All necessary agreements of coordination between these groups and groups responsible for that geographical area shall be submitted to NRMCA at least two (2) months prior to the anticipated examination and/or evaluation date(s).
  - 5.10 Sponsoring groups shall be charged with the following responsibilities:
    - A. Maintain the ethical and professional integrity of the NRMCA certification program(s).
    - B. Conduct the program(s) in a manner which complies with the intent of NRMCA's policies and procedures governing certification.
    - C. Conduct a sufficient number of examination sessions to adequately meet the need for NRMCA certification within the Local Sponsoring Group's area of jurisdiction.
  - 5.11 NRMCA has the right to revoke a Local Sponsoring Group's authority to conduct an NRMCA certification program(s) at will, with an explanation of reason and with 30 days notice.
  - 5.12 If a group is denied approval or if approval is revoked by NRMCA, the group may appeal the decision. All appeals shall be submitted, in writing, to NRMCA Certification Department within sixty (60) days after being notified by NRMCA of denial or revocation. All appeals shall be handled in order as follows:
    - A. A 3-member review panel composed of one NRMCA staff representative from the NRMCA Engineering Department and members of the NRMCA Pervious Concrete Contractor Certification Committee shall review the appeal. Within sixty (60) days after receiving the appeal, NRMCA shall acknowledge receipt of all appeals and notify the group (appellant), in writing as to:
      - a. how the appeal will be reviewed by the review panel (i.e., meeting, letter ballot, telephone conference, etc.) and
      - b. when a decision will be rendered.
    - B. The review panel may in its sole discretion, allow a representative of the group (appellant) to personally appear before them to present arguments. Not less than thirty (30) days in advance of the meeting, NRMCA will notify the group (appellant), in writing, of the date, time and location of the review panel meeting as well as the length of time that will be allotted for presentation and discussion of the appeal. NRMCA shall notify the group (appellant), in writing, of the review panel's decision within sixty (60) days after the review panel has reached a decision.

- C. All decisions made by the NRMCA Pervious Concrete Contractor Certification Committee are final.
- 5.13 All Local Sponsoring Group employees who administer the certification program must sign the ethics statement on Form PCC1.
- 5.14 All Local Sponsoring Group Certification Committee members must sign the ethics statement on Form PCC2.
- 6 EXAMINER, SUPPLEMENTAL EXAMINER, AND PROCTOR CRITERIA**
- 6.1 The examiner shall be a registered professional engineer and should preferably have experience in pervious concrete technology and construction. Alternatively, the primary contact of the Local Sponsoring Group is permitted to serve as the examiner for a local sponsoring group regardless of whether or not he/she is a registered professional engineer.
- 6.2 The examiner shall submit an application to NRMCA for approval and sign an ethics statement on NRMCA Form PCC3 along with a statement of qualifications.
- 6.3 The examiner shall be approved and thereby authorized by NRMCA to conduct the NRMCA Pervious Concrete Contractor Certification written examination and performance evaluation.
- 6.4 The examiner may identify supplemental examiners to assist in administering written examinations and performance evaluations.
- 6.5 The examiner may identify proctors to assist in administering written examinations.
- 6.6 Examiners/supplemental examiners/proctors shall be unrelated professionally and personally to the examinees. Local Sponsoring Groups may petition NRMCA in writing, and request a waiver of this requirement if it creates a hardship to the organization. Waivers shall be granted only if it can be shown that the intent of the policy will be maintained.
- 6.7 Examiners/supplemental examiners/proctors shall not examine anyone on the performance evaluation who is employed in the same organization. Organizations may petition NRMCA in writing, and request a waiver of this requirement if it creates a hardship to the organization. Waivers shall be granted only if it can be shown that the intent of the policy will be maintained.
- 6.8 Supplemental examiners shall be permitted to assist the examiner in proctoring the written examination and conducting the performance evaluation.
- 6.9 Supplemental examiners shall satisfy the following requirements:
  - A. Have had recent experience in pervious concrete construction;
  - B. Be selected and adjudged qualified by the examiner; and
  - C. Be considered trustworthy and conscientious by the Examiner.
- 6.10 Proctors shall be permitted to assist the examiner in proctoring the written examination.
- 6.11 Proctors shall be selected by the examiner by virtue of their being trustworthy and conscientious.
- 6.12 The examiner shall be directly and solely responsible for the following:
  - A. Final approval of the supplemental examiners and proctors;
  - B. Verify conformance to this Policy;
  - C. Order and receive examinations from NRMCA and keep custody of exams until time of administration. Examiner may assign this task to staff of the Local Sponsoring Group.
  - D. Verify the identity of each examinee and assure that the examinees are aware of the certification criteria;
  - E. Verify the performance evaluations conducted by the supplemental examiners by co-signing the cover sheet of the performance evaluation checklists;
  - F. Enter the appropriate grade for the completed performance evaluation on the checklists; and
  - G. Return all Written Examinations (used and unused), Performance Evaluations (used and unused) to NRMCA Certification Department.
  - H. On completion of an examination and/or evaluation, complete and sign a Post Examination Report, Form PCC6 and Examination Material Checklist, Form PCC7.

- 6.13 Examiners, supplemental examiners or proctors are not allowed to define terms or interpret examination questions during the written examination.
- 6.14 Examiners or supplemental examiners shall not observe more than six examinees during the performance evaluation.
- 6.15 The examination session(s) must be supervised constantly by the examiner, or by the supplemental examiner(s) and/or proctor(s).
- 6.16 Examiners, supplemental examiners and proctors shall not be permitted to provide training for examinations or evaluation for which they will administer.

## **7 NRMCA DUTIES AND RESPONSIBILITIES**

- 7.1 NRMCA shall maintain a NRMCA Pervious Concrete Contractor Certification Committee.
- 7.2 This policy shall become effective immediately upon approval by the NRMCA Pervious Concrete Contractor Certification Committee.
- 7.3 NRMCA shall approve the Local Sponsoring Group.
- 7.4 NRMCA shall approve examiners.
- 7.5 NRMCA shall authorize the Local Sponsoring Group to conduct examination sessions for Pervious Concrete Technician, Installer, and Craftsman certifications.
- 7.6 NRMCA shall grade the Written Examinations and review the results of the Performance Evaluations, and notify the examinee of the final results in writing. The examinee will receive the score obtained on the Written Examination and/or Performance Evaluation and pass/fail status. The examiner will receive a list of examinees that have met the certification requirements.
- 7.7 NRMCA shall issue a certificate to successful examinees.
- 7.8 NRMCA shall conduct annual surveillance of certified personnel (see section 9).
- 7.9 NRMCA shall revoke certifications for cause.
- 7.10 NRMCA shall maintain the ethical and professional integrity of the certification program.
- 7.11 NRMCA reserves the right to modify, expand, or reduce the scope of the certification program. Existing certified personnel would be required to meet any new certification requirements at the time of recertification. Any changes to the certification policy will be approved by a consensus of the Certification Committee.
- 7.12 NRMCA will notify certified personnel of certification policy changes in writing at time of recertification.
- 7.13 NRMCA shall review the written examination questions and performance evaluation checklist periodically, but at least annually, to determine if the examination is fair, valid and reliable. Changes to the written examination and performance evaluation will be made immediately if such a review requires changes.
- 7.14 All NRMCA employees who administer the certification program must sign an ethics statement on Form PCC12.

## **8 RECERTIFICATION CRITERIA**

- 8.1 Recertification shall extend the NRMCA certification as a Pervious Concrete Technician, Installer, or Craftsman for a period of five [5] years, Expiration of the recertification shall be based on the date of completion of the written examination.
- 8.2 Recertification for Technicians, Installers and Craftsman shall be obtained by passing the NRMCA Pervious Concrete Contractor Certification Written Examination with a score of 75% or greater; administered by a Local Sponsoring Group approved by NRMCA. Prior certification ID and expiration date shall be documented by the applicant.

- 8.3 Persons applying for a higher level of certification at the time of recertification shall complete the other criteria for that level.

## **9 PERIODIC SURVEILLANCE**

- 9.1 All Installers and Craftsman are subject to random surveillance while they hold a valid certification.
- 9.2 Surveillance will be limited to a mail survey to a random sample of certified personnel (a minimum of 10% of certified Installers and Craftsman will be surveyed annually). The survey shall include questions related to the certified person's use of the certification and their compliance with the certification policies.

## **10 NRMCA CERTIFICATION COMMITTEE**

- 10.1 The NRMCA Pervious Concrete Contractor Certification Committee shall make all decisions regarding certification policy.
- 10.2 The committee shall fairly and equitably represent the interests of all parties significantly impacted by the certification, without any particular interest predominating.
- 10.3 The committee shall be made up of a minimum of 9 members representing contractors, concrete producers, and design professionals with not more than half of the committee nor less than 1 representative(s) from each group. A chairman and vice chairman shall be elected by committee members.
- 10.4 An NRMCA staff member shall serve as the NRMCA staff liaison to the committee but shall not have a vote on the committee. The NRMCA staff liaison shall facilitate Committee deliberations through meetings, teleconference, web conferences and letter ballots as deemed appropriate. Minutes of such meetings shall be maintained and disseminated to the Committee in a timely manner.
- 10.5 Decisions made by the committee shall be determined by a consensus process. However, when disagreement on an issue cannot be made by consensus a vote shall be called and 51% majority of those voting rules. At least half of the members must vote for the vote to be considered valid.
- 10.6 The committee shall meet at least once per year (either in person or via teleconference) to consider changes to the certification policy or to revalidate the current policy.
- 10.7 The committee shall make decisions regarding certification policy based on feedback from certified individuals, local sponsoring group representatives, pertinent technical committees and the general public.
- 10.8 The committee shall be independent of the NRMCA board of directors. The NRMCA board of directors may appoint one NRMCA board member to serve on the committee as a non-voting member of the committee in addition to the minimum number.
- 10.9 NRMCA membership shall not be a requirement of committee membership.
- 10.10 All NRMCA Pervious Concrete Contractor Certification Committee Members must sign the ethics statement on Form PCC13.

## **11 LOGOS, CERTIFICATES AND MARKS**

- 11.1 Only NRMCA and Local Sponsoring Groups may use the NRMCA Pervious Concrete Contractor Certification logo in their marketing materials.
- 11.2 Certified Technicians, Installers and Craftsman are permitted to use the NRMCA Pervious Concrete Contractor Certification logo in their marketing materials, contingent on current certification. They may publicize that they are certified by stating that they are:
- A. NRMCA Certified Pervious Concrete Technician
  - B. NRMCA Certified Pervious Concrete Installer

- C. NRMCA Certified Pervious Concrete Craftsman
- 11.3 Employers of Certified Technicians, Installers and Craftsman are permitted use the NRMCA Pervious Concrete Contractor Certification logo in their marketing materials, contingent on current certification. They may publicize that they have certified personnel in their employ by stating:
- A. We have NRMCA Certified Pervious Concrete Technicians
  - B. We have NRMCA Certified Pervious Concrete Installers
  - C. We have NRMCA Certified Pervious Concrete Craftsmen

**Form PCC1**  
**NRMCA Pervious Concrete Contractor Certification**  
**Local Sponsoring Group Application**

Application Date \_\_\_\_\_  
 Name Local Sponsoring Group \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, ST, ZIP \_\_\_\_\_  
 Phone, Fax \_\_\_\_\_  
 Type of Organization \_\_\_\_\_  
 Geographical Area \_\_\_\_\_

NRMCA Affiliate State Ready Mixed Concrete Association? Please check (Yes) \_\_\_\_\_ (No) \_\_\_\_\_

**PRIMARY CONTACT**

Name \_\_\_\_\_  
 Employer \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, ST, ZIP \_\_\_\_\_  
 Phone/Fax/E-mail \_\_\_\_\_

I HEREBY PLEDGE that as an employee or agent of the Local Sponsoring Group named above and who is involved in administrating the **NRMCA Pervious Concrete Contractor Certification Program**, that I understand the certification policies and procedures and will maintain the ethical and professional integrity of the certification program. I will immediately notify NRMCA if I discover that I no longer meet the requirements of the certification policies and procedures for whatever reason. I understand NRMCA may revoke my Local Sponsoring Group status if I do not meet the certification policies and procedures.

Signed \_\_\_\_\_ Date \_\_\_\_\_

**ALTERNATE CONTACT**

Name \_\_\_\_\_  
 Employer \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, ST, ZIP \_\_\_\_\_  
 Phone/Fax/E-mail \_\_\_\_\_

I HEREBY PLEDGE that as an employee or agent of the Local Sponsoring Group named above and who is involved in administrating the **NRMCA Pervious Concrete Contractor Certification Program**, that I understand the certification policies and procedures and will maintain the ethical and professional integrity of the certification program. I will immediately notify NRMCA if I discover that I no longer meet the requirements of the certification policies and procedures for whatever reason. I understand NRMCA may revoke my Local Sponsoring Group status if I do not meet the certification policies and procedures.

Signed \_\_\_\_\_ Date \_\_\_\_\_

**INVOICING INFO**

Name \_\_\_\_\_

Employer \_\_\_\_\_

Address \_\_\_\_\_

City, ST, ZIP \_\_\_\_\_

Phone/Fax/E-mail \_\_\_\_\_

**COSPONSORING ORGANIZATIONS (if any)**

\_\_\_\_\_

\_\_\_\_\_

**LIST OF CERTIFICATION COMMITTEE MEMBERS (at least 3 required)**

(Attach one [1] *Form PCC2 Certification Committee Member Qualification Statement* form for each member listed.)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

**LIST OF EXAMINERS**

Attach one [1] *Form PCC3 Examiner Application* for any examiner not previously NRMCA-approved.

Name \_\_\_\_\_ Employer: \_\_\_\_\_

Name \_\_\_\_\_ Employer: \_\_\_\_\_

Name \_\_\_\_\_ Employer: \_\_\_\_\_

Name \_\_\_\_\_ Employer: \_\_\_\_\_

**LIST OF SUPPLEMENTAL EXAMINERS / PROCTORS**

Name \_\_\_\_\_ Employer: \_\_\_\_\_

Name \_\_\_\_\_ Employer: \_\_\_\_\_

Name \_\_\_\_\_ Employer: \_\_\_\_\_

Name \_\_\_\_\_ Employer: \_\_\_\_\_

**WE WISH TO SPONSOR THE NRMCA PERVIOUS CONCRETE CONTRACTOR CERTIFICATION PROGRAM FOR THE FOLLOWING REASON(S):**

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**WE PLAN TO OFFER A TRAINING COURSE PRIOR TO THE EXAMINATION(S):**

Yes \_\_\_\_\_

**WE WILL INCLUDE PERVIOUS PLACEMENT DEMONSTRATIONS DURING OUR TRAINING PROGRAM:**

Yes \_\_\_\_\_

**WE WILL ADMINISTER THE PERFORMANCE EVALUATION COMPONENT OF THE CERTIFICATION PROGRAM:**

Yes \_\_\_\_\_

**WE PLAN TO OFFER \_\_\_\_\_ PROGRAMS PER YEAR.**

**TENTATIVE DATES AND LOCATIONS ARE:**

Date _____	Location: _____
Date _____	Location: _____
Date _____	Location: _____
Date _____	Location: _____

**WE HAVE ATTACHED THE FOLLOWING ADDITIONAL INFORMATION:**

- \_\_\_\_\_ Form PCC2 Certification Committee Member Qualification Statement
- \_\_\_\_\_ Form PCC3 Examiner Application for each examiner not previously NRMCA-approved
- \_\_\_\_\_ Letter of agreement for coordination with another Local Sponsoring Group(s) (if applicable)

***Return packet to:***

**NRMCA Certification Department  
National Ready Mixed Concrete Association  
900 Spring Street  
Silver Spring, MD 20910  
(240) 485-1154**



**Form PCC2**  
**NRMCA Pervious Concrete Contractor Certification**  
**LSG Certification Committee Member Qualification Statement**

Return this form with the Local Sponsoring Group Application or separately to:

**NRMCA Certification Department**  
**National Ready Mixed Concrete Association**  
**900 Spring Street**  
**Silver Spring, MD 20910**  
**(240) 485-1154**

I have been selected by (Local Sponsoring Group) \_\_\_\_\_  
to serve as a **member of their Certification Committee** for the NRMCA Pervious Concrete Contractor  
Certification Program.

My term of membership is currently set to expire on (date) \_\_\_\_\_

Name \_\_\_\_\_

Employer \_\_\_\_\_

Address \_\_\_\_\_

City, ST, ZIP \_\_\_\_\_

Phone/Fax \_\_\_\_\_

Cell Phone/E-mail \_\_\_\_\_

Summary of my education / experience qualifications

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I HEREBY PLEDGE that as Local Sponsoring Group Certification Committee member who is involved in  
administrating the **NRMCA Pervious Concrete Contractor Certification Program**, that I understand the  
certification policies and procedures and will maintain the ethical and professional integrity of the  
certification program. I will immediately notify NRMCA if I discover that I no longer meet the requirements  
of the certification policies and procedures for whatever reason. I understand NRMCA may revoke my  
Local Sponsoring Group Certification Committee status if I do not meet the certification policies and  
procedures.

Signed \_\_\_\_\_ Date \_\_\_\_\_



## Form PCC3 NRMCA Pervious Concrete Contractor Certification Examiner Application

Return this form with the Local Sponsoring Group Application form or separately to:

**NRMCA Certification Department  
National Ready Mixed Concrete Association  
900 Spring Street  
Silver Spring, MD 20910  
(240) 485-1154**

I have been selected by (Local Sponsoring Group) \_\_\_\_\_  
to serve as the **Examiner** for the Pervious Concrete Contractor Certification Program.

Name \_\_\_\_\_  
Employer \_\_\_\_\_  
Address \_\_\_\_\_  
City, ST, ZIP \_\_\_\_\_  
Phone/Fax \_\_\_\_\_  
Cell Phone/E-mail \_\_\_\_\_

Summary of education – state degree, field, school, date  
\_\_\_\_\_  
\_\_\_\_\_

Summary of work experience in concrete construction, testing, inspection – company, date of service, scope of work; knowledge of pervious concrete technology  
\_\_\_\_\_  
\_\_\_\_\_

Professional Engineer License Information (not required for primary contact of the LSG)

STATE	BRANCH	DATE GRANTED	LICENSE NUMBER	EXPIRATION DATE

I HEREBY PLEDGE that as Examiner who is involved in administrating the **NRMCA Pervious Concrete Contractor Certification Program**, that I understand the certification policies and procedures and will maintain the ethical and professional integrity of the certification program. I will immediately notify NRMCA if I discover that I no longer meet the requirements of the certification policies and procedures for whatever reason. I understand NRMCA may revoke my Local Sponsoring Group Examiner status if I do not meet the certification policies and procedures.

Signed \_\_\_\_\_ Date \_\_\_\_\_



## Form PCC4

### NRMCA Pervious Concrete Contractor Certification Examiner Step-by-Step Instructions

#### PRIOR TO EXAM

1. Determine date of Written Examination and/or Performance Evaluation
2. Determine certification/exam material needs of individuals registered for certification session:
  - Written Examinations only, administered to 1<sup>st</sup> time Technician candidates, or re-tests or re-certifications for Technician, Installer, and Craftsmen candidates
  - Full Installer examination packages, which are comprised of Written Examination, Performance Evaluation and Installer Application
  - Full Craftsman examination packages, which are comprised of Written Examination, Performance Evaluation and Craftsman Application. The standard spreadsheet to document work experience shall be provided.
  - Performance Evaluations only, administered to 1<sup>st</sup> time Installer and Craftsmen candidates, or re-tests or re-certifications for Installer and Craftsmen candidates
  - Note that many of the referenced forms are posted on the NRMCA website – [www.nrmca.org](http://www.nrmca.org).
3. Only approved Local Sponsoring Groups or Examiners can order certification materials. Exam materials will be sent only to a pre-approved location, based on the address listed in the Examiner's or Local Sponsoring Group's application. Certification/exam materials must be ordered at least **four (4) weeks** prior to the examination date by completing Form PCC11.
4. If your exam materials package does not arrive from NRMCA at least two (2) weeks prior to the exam session, call the NRMCA Certification Department at (240) 485-1154.
5. Upon arrival of the exam materials, immediately inspect the examination package to ensure all the necessary contents are included:
  - PCC4 Examiner Step-by-Step Instructions (this form) – one (1) for each session
  - PCC5 Written Exam Sign-in / Sign-out Sheet – one (1) for each Written Examination session
  - PCC6 Post-Examination Report – one (1) for each session
  - PCC7 Exam Materials Check List – one (1) for each session
  - Written Examinations – one for each Technician, Installer and Craftsman candidate
  - Written Examination Scantron Answer Sheets – one for each Technician, Installer and Craftsman candidate
  - PCC8 Installer Application – one for each Installer candidate (upon request)
  - PCC9 Craftsman Application and spreadsheet to document work experience – one for each Craftsman candidate (upon request)
  - PCC10 Performance Evaluation – one for each Installer and Craftsman candidate (upon request)

It is the responsibility of the Examiner or the Local Sponsoring Group to secure the test materials until the time the exam is administered.

6. Once the materials arrive, the examiner should review the examinee forms and instructions and become familiar with the certification requirements – the examiner will probably be required to answer questions from the examinees about completing and submitting the Installer and/or Craftsman Applications, where applicable.
7. Select and instruct any proctors to administer the written examination and supplemental examiners to facilitate the performance evaluation. Make sure that proctors and supplemental examiners have the opportunity to read and digest these guidelines prior to the test date; make sure they clearly understand the required procedures.
8. Obtain #2 lead pencils or black ink pens for all examinees.

## ON EXAM DAY

### Preparation

1. Review the Certification Policy. Keep this policy in your possession at all times for reference on Exam Day.
2. Ensure that the setup for the written examination has seating such that there is adequate space separating examinees. Ensure that the Local Sponsoring Group has established the area and necessary requirements to administer the performance evaluation (when applicable).

### Written Examination

3. All examinees should report 30 minutes before the exam START TIME, so that the Examiner has time to complete pre-test procedures.
4. All examinees must sign-in on Form PCC5 as they arrive. The Examiner must check the name against those who were scheduled to attend and verify his/her identify by checking a photo ID.
5. For the written examination, the examinees should not have any material with them other than a #2 lead pencil or a black ink pen. If he/she has other material, the examinee must give the material to the examiner or proctor until the examinee turns in his/her exam.
6. Seating arrangements should ensure that all examinees are spread out and that reading off of another exam is very unlikely.
7. Explain the criteria for certification as a pervious concrete Technician, Installer or Craftsman. Distribute Form PCC8 Installer Application to those intending to obtain Installer certification and Form PCC9 Craftsman Application to those intending to obtain Craftsman certification.
8. At the designated start time, the Examiner should pass out one (1) Scantron answer sheet to each examinee.
9. The Examiner should go over the left portion of the Scantron answer sheet with the examinees. Together the class will fill out the requested information.
  - a. Name: examinee's last name, and first 6 letters of examinee's first name
  - b. Gender: optional
  - c. Grade or education: leave blank
  - d. Birth date: optional
  - e. Identification #: located on the top right corner of exam
  - f. Special code: leave blank
10. Now direct the examinees to the right portion of the Scantron answer sheet. Explain that this is where the examinees record their answers. They can also write (circle) the correct answer in the test booklet and transfer the answers to the Scantron answer sheet. The bubble on the Scantron answer sheet needs to be completely filled. They can also write notes or scribble calculations if needed in the test booklet. Please emphasis that only the answers on the Scantron answer sheet will be corrected.
11. Tell the examinees that the test is a multiple-choice / true-false test.
12. The written test is 60 questions. The test grade is based on the number correct out of 60 questions. A passing grade is a minimum of 75% (45 out of 60 correct) or greater. All unanswered questions are marked "incorrect."
13. Once examinees understand how to fill in the Scantron answer sheet, individually hand one (1) exam to each examinee. Examinees are not to open the exam booklet until the Examiner instructs examinees to do so. Examinees should clearly fill out their name and contact information as requested on the front cover of the exam booklet and sign the ethics statement. They should verify that all pages of the exam are included in their copy of the exam as indicated on the cover.
14. Explain to the examinees that they have two (2) hours to take the exam. Tell them the start time is \_\_\_\_\_, the end time is \_\_\_\_\_, and post how much time is left periodically.
15. Tell the examinees that the time allowance for the written examination is very generous, therefore, many could finish before the allotted time. Instruct examinees that if they finish the exam before time is called, examinees are to quietly bring up their Scantron answer sheets inserted into their test booklet and submit them to the Examiner.
16. Examiner, a supplemental examiner or proctor must be in the test room at all times, must maintain order and periodically circulate around the room to prevent cheating.

**LATE ARRIVALS for the WRITTEN EXAM**

1. Admission of late arrivals is allowed, but NO late-arrival examinee is allowed to test if the time of arrival at the test room exceeds 30 minutes after their report time or if an examinee has left the test area on completion of the exam.
2. Explain to the late arrival that the admittance is with the understanding that he/she must cease work at the scheduled completion time for the exam. Therefore, the time that has already passed since the exam started will be deducted from their time to take the exam. The late arrival will, therefore, have less than two (2) hours to answer the exam questions.
3. Examiner should note late arrivals on the exam sign in form.
4. If the late arrival wishes to proceed, quietly discuss the test instructions and direct the examinee to begin testing upon taking their assigned seat.

**PERFORMANCE EVALUATION – IF APPLICABLE**

1. Verify that all Supplemental Examiners conform to the requirements of the Certification Policy **before** beginning the Performance Evaluation.
2. Before the evaluation begins, distribute Form PCC8 Installer Application or Form PCC9 Craftsman Application to all attempting the Performance Evaluation.
3. The Examiner (or Supplemental Examiner) verifies the examinee by checking identification of the examinee's photo identification.
4. The Examiner (or Supplemental Examiner) will give the examinee Form PCC10 Performance Evaluation to fill out the demographic information, read the liability waiver, and sign the evaluation sheet. The examinee is permitted to review the items on the checklist that he/she will be evaluated on. **Do not allow an examinee to begin the evaluation if he/she has not signed the release!**
5. The Examiner (or Supplemental Examiner) writes "P" for Pass or "F" for Fail in the appropriate space on the checklist as the examinee finishes each item on the checklist. If the performance task is not executed correctly the first time, the examinee is allowed a second attempt to correctly attempt the task. The Examiner notes the pass/fail result each time. (The task does not need to be repeated if executed correctly on the first try.)
6. The Examiner collects all completed performance evaluations from the Supplemental Examiners.
7. The Examiner verifies that all items on the checklist have been evaluated on the individual Performance Evaluations and that the Supplemental Examiners have signed the checklist.

**FOLLOWING THE CERTIFICATION SESSION(S)**

1. Complete and sign Form PCC6 Post Examination Report and Form PCC7 Exam Material Checklist. Ensure the correct numbers of exams and forms used are indicated on Form PCC7. The Local Sponsoring Group will be billed for examination use based on number of Written Examinations.
2. Collate each examinee's Written Examination booklet and Scantron answer sheet, and Performance Evaluation together. The individual Scantron answer sheet and Performance Evaluation should be inserted into each individual Written Examination booklet. Keep materials together. **DO NOT** organize booklets, Scantron answer sheets, Performance Evaluations and forms into separate stacks. Carefully repackage all materials (used and unused.)
3. The following need to be returned
  - a. Form PCC5 – Written exam sign in sheet
  - b. Form PCC6 – Post Exam Report
  - c. Form PCC7 – Exam Materials Checklist
  - d. All completed and unused Written Examinations.
  - e. All completed Performance Evaluations.
4. Send to NRMCA via a method that is traceable (we recommend UPS or FedEx) to:

**NRMCA Certification Department  
National Ready Mixed Concrete Association  
900 Spring Street  
Silver Spring, MD 20910  
(240) 485-1154**



**Form PCC6  
NRMCA Pervious Concrete Contractor Certification  
Post Examination Report**

Examiner \_\_\_\_\_

Company \_\_\_\_\_

Business Phone \_\_\_\_\_

E-Mail Address \_\_\_\_\_

NRMCA Pervious Concrete Contractor Certification examination session was conducted as follows:

Date \_\_\_\_\_ Location (City, ST) \_\_\_\_\_

Local Sponsoring Group \_\_\_\_\_

List the names of all PROCTORS and SUPPLEMENTAL EXAMINERS and their affiliations that were present for this certification session:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_ I hereby verify that I **did not** administer examinations to supervisors, coworkers, or subordinates of the organization who employs me.

\_\_\_\_\_ I hereby verify that the proctors and supplemental examiners assisting me **did not** administer examinations to supervisors, coworkers, or subordinates of the organization that employ them.

**Note: If either of the above statements cannot be answered affirmatively, describe the situation on a separate sheet and attach it to this form. A waiver of potential conflict-of-interest must be granted BEFORE exam results can be processed.**

I, the undersigned NRMCA-approved examiner verify that the Written Examination and Performance Evaluation (if applicable) were administered in accordance with the Certification Policy. I verify that the written examination was kept secret and confidential and was not copied for any reason. Additionally, I verify that I, or my designated proctor or supplemental examiner was present and in full supervision during the examination and evaluation session, and that all used and unused examinations and evaluations are being returned to NRMCA as instructed.

Signature of Examiner \_\_\_\_\_ Date \_\_\_\_\_

**NOTE: All of the above information MUST be submitted to NRMCA in order to process examination results. Incomplete or missing information will delay processing individual and/or final examination results!**

## Form PCC7 NRMCA Pervious Concrete Contractor Certification Examination Material Checklist

Please use this checklist to verify receipt of all materials in the **Pervious Concrete Contractor Certification Examination Packet**. Once opened, all materials must be secured and locked until shipped back to NRMCA. The number of exams received by the Examiner should be shipped back by the Examiner, including all unused Written Examinations and Performance Evaluations. Therefore, the number shipped back should equal the number received and the number returned. Local Sponsoring Group will be billed \$45 for each textbook used; \$90 for each Written Examination used.

- \_\_\_\_\_ PCC4: Examiner Step by Step Instructions      Do not return
- \_\_\_\_\_ PCC5: Written Exam Sign-in / Sign-out Sheet      Complete and return
- \_\_\_\_\_ PCC6: Post Examination Report      Complete and return
- \_\_\_\_\_ PCC7: (This form)      Complete and return

	NUMBER SHIPPED	NUMBER RECEIVED	NUMBER USED AND RETURNED	NUMBER NOT USED & RETURNED
Textbooks			NA	NA
Written Examinations				
Scantron answer sheets				
PCC8 Installer Applications			NA	NA
PCC9 Craftsman Applications			NA	NA
PCC10 Performance Evaluations			NA	NA

Examiner checking in materials \_\_\_\_\_

Date Received \_\_\_\_\_

Written Test Date \_\_\_\_\_

Performance Test Date \_\_\_\_\_

Date shipped back to NRMCA \_\_\_\_\_

Examiner Phone Number \_\_\_\_\_

Exams must be returned to NRMCA by a traceable shipping system in case the exams are lost to:

**NRMCA Certification Department  
National Ready Mixed Concrete Association  
900 Spring Street  
Silver Spring, MD 20910  
(240) 485-1154**



## Form PCC8 NRMCA Pervious Concrete Contractor Certification Installer Application

ALL **Installer** certification applicants must fill out this form to verify their project experience performing previous concrete related work include placing, consolidating, jointing, curing and protection.

### Pervious Concrete Installer Certification Criteria

1. Pass the NRMCA Pervious Concrete Contractor Written Examination with a 75% score or greater.
2. Complete a Performance Evaluation administered by a Local Sponsoring Group approved by NRMCA.
3. Provide documentation of successful construction of a minimum of 3 projects with a total area exceeding 10,000 square feet (1000 m<sup>2</sup>).

### Installer Application Instructions

1. **Installer** applicants must complete Sections A, B, C and D of this form.
2. Make copies of this form as needed.
3. When completed, send this form to the principal of your Local Sponsoring Group who will verify the information in Sections B, C and D by completing Section E and mailing this form directly to the NRMCA Certification Department.

### SECTION A – to be completed by **Installer** applicants

Name \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, ST, ZIP \_\_\_\_\_  
 Phone/Fax/E-Mail \_\_\_\_\_  
 Employer \_\_\_\_\_  
 Supervisor/Title \_\_\_\_\_  
 Phone/Fax/E-Mail \_\_\_\_\_

### SECTION B – to be completed by **Installer** applicants

Date of NRMCA Pervious Contractor Certification Written Examination \_\_\_\_\_  
 Location and Local Sponsoring Group \_\_\_\_\_  
 \*Score \_\_\_\_\_ \*Certification ID \_\_\_\_\_

\* Leave blank if scores have not been reported to you

### SECTION C – to be completed by **Installer** applicants

Date of NRMCA Pervious Concrete Contractor Certification Performance Evaluation \_\_\_\_\_  
 Location and Local Sponsoring Group \_\_\_\_\_  
 \*Pass or Fail \_\_\_\_\_

\* Leave blank if this has not been reported to you

**SECTION D** – to be completed by **Installer** applicants

Document a minimum of 3 projects totaling at least 10,000 ft<sup>2</sup> (1000 m<sup>2</sup>) of constructed area. Document more projects as necessary to meet or exceed 10,000 ft<sup>2</sup> total constructed area. Please document project experience below.

Project Location (Name, Address)	Constructed Area (ft <sup>2</sup> or m <sup>2</sup> )	Date Constructed	Owner or other reference (Name and Phone)

I authorize the principal of my Local Sponsoring Group to verify information concerning my project experience including visiting projects and/or questioning owners of these projects. I agree to release and hold harmless any individual, company, or institution, including the National Ready Mixed Concrete Association, and any persons connected therewith from liability imposed by law in furnishing such information. I understand that untruths or misrepresentation contained herein constitute grounds for denial and/or revocation of certification.

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

**SECTION E – to be completed by the principal of the Local Sponsoring Group**

**Instruction to principal of the Local Sponsoring Group**

1. Review all of the information provided by the applicant in SECTION D. You are being asked to verify project experience in order for this applicant to meet the qualifications for certification as a *NRMCA Pervious Concrete Installer*. Please note that the disclaimer signed by the applicant in SECTION E releases you from civil liability in regards to statements provided to the best of your knowledge by the applicant, and establishes that the applicant is freely requesting that you provide this information. **Note: The applicant should not see this form after you fill in SECTION E.**
2. **Performance Evaluation:** It is recommended for the Performance Evaluation placement, the LSG examiner should allow for a full width pad of at least 10 feet length of pervious concrete with an evaluation of each examinee’s proficiency on a full range of pervious crew roles and tasks. This is considered an important supplement to text book review for the examinee. If possible, or as may be necessary, the LSG may conduct the performance evaluation on a project (during the mock placement) or other opportunity that best affords an opportunity to evaluate the examinees.
3. Return the completed form along with a check for \$25.00 made payable to NRMCA directly to:

**NRMCA Certification Department  
 National Ready Mixed Concrete Association  
 900 Spring Street  
 Silver Spring, MD 20910  
 (240) 485-1154**

I have reviewed the project information in SECTION D and verify that the information is

- Correct as stated
- Not correct as stated

If not correct as stated, please explain below.

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I have honestly evaluated and verify the accuracy of the information being submitted on this form by the applicant.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Work phone number

\_\_\_\_\_  
Work email

\_\_\_\_\_  
Local Sponsoring Group



## Form PCC9 NRMCA Pervious Concrete Contractor Certification Craftsman Application

ALL **Craftsman** certification applicants must fill out this form to verify their work experience performing previous concrete related work include placing, consolidating, jointing, curing and protection.

**Pervious Concrete Craftsman Certification Criteria**

1. Pass the NRMCA Pervious Concrete Contractor Written Examination with a 75% score or greater.
2. Possess a current ACI Flatwork Finisher Technician or Craftsman certification at the time of application.
3. Possess the following experience:
  - a. **OPTION A:** Complete a performance evaluation administered by a Local Sponsoring Group approved by NRMCA and provide documented work experience constructing pervious concrete pavement exceeding 1500 hours  
OR
  - b. **OPTION B:** Provide documentation of work experience constructing pervious concrete pavements exceeding 3000 hours.

**Craftsman Application Instructions**

1. **Craftsman** applicants must complete Sections A, B, C, D and E of this form.
2. Make copies of this form as needed.
3. When completed, send this form to the principal of your Local Sponsoring Group who will verify the information in Sections B and E by completing Section F and mailing this form directly to the NRMCA Certification Department.

**SECTION A – to be completed by Craftsman applicants**

Name \_\_\_\_\_

Address \_\_\_\_\_

City, ST, ZIP \_\_\_\_\_

Phone/Fax/E-Mail \_\_\_\_\_

Employer \_\_\_\_\_

Supervisor/Title \_\_\_\_\_

Phone/Fax/E-Mail \_\_\_\_\_

**SECTION B – to be completed by Craftsman applicants**

List your ACI Concrete Flatwork Technician or Craftsman Certification number \_\_\_\_\_

List your ACI Concrete Flatwork Technician or Craftsman Certification expiration date \_\_\_\_\_

**SECTION C – to be completed by Craftsman applicants**

Date of NRMCA Pervious Contractor Certification Written Examination \_\_\_\_\_

Location and Local Sponsoring Group \_\_\_\_\_

\*Score \_\_\_\_\_ \* Certification ID \_\_\_\_\_

\* Leave blank if scores have not been reported to you

**SECTION D – to be completed by Craftsman applicants (For Criteria 3 Option A only)**

Date of NRMCA Pervious Contractor Performance Evaluation \_\_\_\_\_

Location and Local Sponsoring Group \_\_\_\_\_

\* Pass or Fail \_\_\_\_\_ \* Leave blank if this has not been reported to you



**SECTION E** – to be completed by **Craftsman** applicants (make additional copies of this page if needed)

**Option A:** Document a minimum of 1500-2999 hours experience with employer references provided below. For this option successful completion of a performance exam is an additional requirement.

**Option B:** Document a minimum of 3000+ hours pervious concrete related work experience.

Complete the standard spreadsheet for documented work/project experience and statement of at least three problems and resolutions during installation of pervious concrete.

**Total Documented Hours of Experience with Pervious Concrete Construction** \_\_\_\_\_

I authorize the principal of my Local Sponsoring Group to verify information concerning my work experience including contacting the employer contacts identified above to verify pervious concrete related work experience. I agree to release and hold harmless any individual, company, or institution, including the National Ready Mixed Concrete Association, and any persons connected therewith from liability imposed by law in furnishing such information. I understand that untruths or misrepresentation contained herein constitute grounds for denial and/or revocation of certification.

\_\_\_\_\_  
Signature of Applicant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

**SECTION F – to be completed by the principal of the Local Sponsoring Group and their Certification Committee****Instruction to principal of the Local Sponsoring Group**

1. Verify that the applicant has a current ACI Flatwork Finisher Certification card as in SECTION B
2. Certification Committee is to review all of the information provided by the applicant on the attached spreadsheet. The certification committee is being asked to review and accept the pervious concrete related work experience in order for this applicant to meet the qualifications for certification as a *NRMCA Pervious Concrete Craftsman*. Please note that the disclaimer signed by the applicant in SECTION E releases you from civil liability in regards to statements provided to the best of your knowledge by the applicant, and establishes that the applicant is freely requesting that you provide this information. **Note: The applicant should not see this form after you fill in SECTION F.**
3. **Performance Evaluation:** It is recommended for the Performance Evaluation placement, the LSG examiner should allow for a full width pad of at least 10 feet length of pervious concrete with an evaluation of each examinee's proficiency on a full range of pervious crew roles and tasks. This is considered an important supplement to text book review for the examinee. If possible, or as may be necessary, the LSG may conduct the performance evaluation on a project (during the mock placement) or other opportunity that best affords an opportunity to evaluate the examinees.
4. **Work Experience:** Please ensure that the work experience claimed by the applicant is reasonably achievable. As a guide note that for an applicant to achieve 1500 hours, the following can be used as a guide: 1500 hours @ 8 hrs/day = 187 days // 1500 hours @ 4 hrs/day = 375 days. 3000 hrs @8 hrs / day = 375 days.  
*Time that can be counted towards work experience:* Time spent working with the ready mix supplier on pervious concrete mixture development and trial placements; actual time spent placing pervious concrete; including: setting forms, placing aggregate base / retention layer (if performed), placing fabric (if necessary), placing, finishing and curing the pervious concrete pavement; time spent in correcting defects to bring the pavement to an acceptable condition to the owner. The craftsman applicant can include time spent in continuing education on pervious concrete including participation on committee meetings, administering or participation in demonstrations and training programs. Time spent on continuing education is capped at 100 hrs per application.  
*Time that does not count towards work experience* Expo shows, bidding process, commuting to and from, plan review, soils report review, any other task that does not pertain to the actual placement of the pervious.
5. Return the completed form along with a check for \$25.00 made payable to NRMCA directly to:

**NRMCA Certification Department  
National Ready Mixed Concrete Association  
900 Spring Street  
Silver Spring, MD 20910  
(240) 485-1154**

The applicant has a current ACI Flatwork Technician Certification card:  YES  NO

The certification committee (min. 3 members) reviewing this Craftsman application was comprised of:

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_

The certification committee has reviewed the work experience information in SECTION E and to the best my knowledge verify that the information is

Correct as stated

Not correct as stated

If not correct as stated, please explain below.

\_\_\_\_\_  
\_\_\_\_\_

I have honestly evaluated and verify the accuracy of the information being submitted on this form by the applicant.

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Work phone number

\_\_\_\_\_  
Work email

\_\_\_\_\_  
Local Sponsoring Group

## Form PCC10 NRMCA Pervious Concrete Contractor Certification Performance Evaluation

Date \_\_\_\_\_

Examinee Name (Print): \_\_\_\_\_  
 Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, State Zip \_\_\_\_\_  
 Location of test \_\_\_\_\_  
 Sponsoring Group \_\_\_\_\_

### Release

Examinee should sign this statement BEFORE STARTING THE PERFORMANCE EVALUATION

I hereby acknowledge that I have read the instructions included in on this form, and I understand the testing and grading policies. I agree to comply with and abide by all evaluation rules and procedures.

In consideration of being allowed to participate in this evaluation process, I hereby agree to release, defend, and hold harmless the National Ready Mixed Concrete Association (NRMCA), the Local Sponsoring Group, and the agents of both organizations, from and against any and all actions which might result from my participation in this process, including harm or actions arising out of the negligence of NRMCA, the Local Sponsoring Group, or agents of either organization.

NRMCA reserves the right to cancel any evaluation or refuse to certify any person if NRMCA believes the results are invalid due to testing irregularities or applicant misconduct. NRMCA also reserves the right to disclose information regarding all aspects of applicant's test results to those persons who applicant has authorized disclosure. Applicant releases and promises not to sue NRMCA for such actions taken in accordance with this policy.

Examinee Signature: \_\_\_\_\_ Date \_\_\_\_\_

### OVERALL GRADE ON PERFORMANCE EVALUATION

PASS       FAIL

**Guidance to LSG:** It is recommended for the Performance Evaluation placement, the LSG examiner should allow for a full width pad of at least 10 feet length of pervious concrete with an evaluation of each examinee's proficiency on a full range of pervious crew roles and tasks. This is considered an important supplement to text book review for the examinee. If possible, or as may be necessary, the LSG may conduct the performance evaluation on a project (during the mock placement) or other opportunity that best affords an opportunity to evaluate the examinees.

As the Examiner for the NRMCA Pervious Concrete Contractor Certification Program, I hereby state that this Performance Evaluation was administered according to the requirements and procedures described in the instructions that accompanied this evaluation form. It is my understanding that the examinee did not receive assistance or guidance from anyone associated with this program that might have interfered with the fair and objective testing of the examinee's abilities.

Comments: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

Examiner Signature: \_\_\_\_\_ Date: \_\_\_\_\_

ITEM	PERFORMANCE ITEMS	PASS (P) OR FAIL (F)	
		1 <sup>st</sup> Try	2 <sup>nd</sup> Try
1	<p>Did the examinee have the appropriate tools available for the placement. The following is a suggested list of needed tools</p> <ul style="list-style-type: none"> <li>• Hand screed, vibratory screed, or mechanical roller screed</li> <li>• Hand roller (10" Schedule 40 Steel Pipe) or mechanical roller screed</li> <li>• Pizza cutter (6" Schedule 40, with center flange)</li> <li>• Rakes</li> <li>• Square nose shovels</li> <li>• Hand floats</li> <li>• Edgers</li> <li>• 6 mil polypropylene sheet</li> <li>• Spray can with vegetable oil</li> <li>• String line</li> <li>• Forms and tools and equipment to set forms</li> <li>• Riser Strips and tools and equipment to place riser strips (if applicable)</li> <li>• Appropriate cleaning tools needed during placement</li> </ul> <p>If alternative tools were used, it is the examiner's discretion to ensure that they would be acceptable for a successful placement</p>		
2	<p>Did the examinee have the proper personal protective equipment needed for placing concrete. The following is a suggested list</p> <ul style="list-style-type: none"> <li>• Hard hat</li> <li>• Safety glasses</li> <li>• Steeled toed shoes or boots</li> <li>• Chemical resistant safety gloves</li> <li>• Long pants</li> <li>• Shirt WITH long sleeves</li> </ul> <p>It is the examiner's discretion to ensure that the examinee was following safe practices for placing concrete</p>		
3	<p>Did examinee verify adequacy of the subgrade before placement of concrete?</p> <ul style="list-style-type: none"> <li>• Compaction</li> <li>• Free of all foreign matter</li> <li>• Uniformity of subgrade surface</li> <li>• Moistened but with no standing water</li> </ul>		
4	Did examinee place the correct forms for the required thickness?		
5	Verify that form risers were used (if applicable)?		
6	Were the joint locations (if used) marked on the forms		
7	Did examinee inspect pervious concrete for consistency and adequate aggregate surface coating before placing concrete?		

ITEM	PERFORMANCE ITEMS	PASS (P) OR FAIL (F)	
		1 <sup>st</sup> Try	2 <sup>nd</sup> Try
8	Was discharge, spreading, and strike-off completed in a rapid and consistent manner? <ul style="list-style-type: none"> <li>• Semicircular discharge</li> <li>• Raking concrete in place</li> <li>• Squaring off edges</li> </ul>		
9	Were wheel ruts or other flaws on the prepared subgrade surface raked and recompact?		
10	Was the frequency of a vibratory strike off device (if used) adjusted to account for the concrete's consistency?  If a wooden strike off tool was used, was the strike off operation conducted in an appropriate motion to obtain the desired surface?  If mechanical roller screed was used, was the strike off operation conducted in an appropriate motion to obtain desired surface?		
11	Was fresh concrete kept above the strike off device to eliminate surface defects?		
12	Was concrete struck off higher than forms to allow for compaction (if applicable)?		
13	Were the edges properly compacted?		
14	Did examinee correct excessively high or low areas prior to compaction?		
15	Was compaction performed in a rapid and consistent manner?		
16	Did examinee spray the roller to prevent buildup on the roller (if applicable)?		
17	Was surface of the pervious concrete compacted to a uniform grade?		
18	Was jointing performed to an acceptable depth and alignment?		
19	Were edges properly finished?		
20	Was the concrete kept moist during all operations?		
21	Was the compacted pavement adequately covered for curing promptly after placement?		

**OVERALL GRADE ON PERFORMANCE EVALUATION**

PASS       FAIL

## Form PCC11 NRMCA Pervious Concrete Contractor Certification Certification Session Order Form

Use this form to order examination materials for certification sessions. The name of the person placing this order, the address, and Local Sponsoring Group must be either those of the principal of the Local Sponsoring Group or the Examiner NRMCA has on record for this Local Sponsoring Group. Materials should be ordered at least 4 weeks in advance of your scheduled certification session.

Name of Person Placing Order \_\_\_\_\_  
 Company \_\_\_\_\_  
 Address \_\_\_\_\_  
 City, ST, ZIP \_\_\_\_\_  
 Business Phone \_\_\_\_\_  
 Business Fax \_\_\_\_\_  
 E-Mail Address \_\_\_\_\_  
 Local Sponsoring Group \_\_\_\_\_

I wish to order the following NRMCA Pervious Concrete Contractor Certification materials for a certification session scheduled for the following date and location:

Date \_\_\_\_\_ Location (City, ST) \_\_\_\_\_

ITEM	NUMBER REQUIRED	PRICE	SUB-TOTAL
Textbooks		@ \$45 each <sup>1</sup>	
Written Examinations		@ \$90 each <sup>2</sup>	
PCC10: Performance Evaluations		No charge <sup>3</sup>	
PCC8: Installer Applications		No charge <sup>3</sup>	
PCC9: Craftsman Applications		No charge <sup>3</sup>	
		TOTAL:	

- Textbooks are mailed UPS Ground (3-5 business days) upon receipt of your order. **If you require textbooks more quickly than this because you ordered materials too late you will be billed for express shipping.** You will be invoiced for the number of textbooks you order immediately upon shipping of the textbooks.
- Written Examinations, Performance Evaluations, Installer Applications and Craftsman Applications are mailed UPS Ground (3-5 business days) to arrive 2 days in advance of your certification session date listed above. **If you require these materials to be shipped more quickly than this because you ordered materials too late you will be billed for express shipping.** You must return all Written Examinations, used and unused, after the certification session. You will be invoiced for used Written Examinations immediately upon returning the used and unused exams. **If the total number of exams returned is not the same as those sent, it will be considered a reason to revoke a Local Sponsoring Group's authority to conduct an NRMCA certification program(s).**
- Performance Evaluations, Installer Applications, and Craftsman Applications are provided at no charge. However, a \$25.00 check must accompany each completed Installer Application and Craftsman Application (see form PCC8 and PCC9 for details).
- A \$25.00 expedited fee is charged for those requesting results within five business days.

Signature of Person Placing Order: \_\_\_\_\_ Date: \_\_\_\_\_

- Order by fax by completing this form and faxing it to NRMCA Certification Department at (301) 585-4219.
- Order by e-mail by completing this form e-mailing it to [SDickens@nrmca.org](mailto:SDickens@nrmca.org).



**Form PCC12**  
**NRMCA Pervious Concrete Contractor Certification**  
**NRMCA Ethics Statement**

Name \_\_\_\_\_

Company \_\_\_\_\_

Business Address \_\_\_\_\_

City, State Zip \_\_\_\_\_

Business Phone \_\_\_\_\_

Business Fax \_\_\_\_\_

Business E-mail \_\_\_\_\_

  

Home Address \_\_\_\_\_

City, State Zip \_\_\_\_\_

Home Phone \_\_\_\_\_

I HEREBY PLEDGE that as an employee of NRMCA or agent of NRMCA who is involved in administrating the **NRMCA Pervious Concrete Contractor Certification Program**, I understand the certification policies and procedures and will maintain the ethical and professional integrity of the certification program. I will immediately notify NRMCA if I discover that I no longer meet the requirements of the certification policies and procedures for whatever reason.

Signed \_\_\_\_\_ Date \_\_\_\_\_

**Form PCC13**  
**NRMCA Pervious Concrete Contractor Certification**  
**NRMCA Certification Committee Member Qualification Statement**

Return this form to:

**NRMCA Certification Department**  
**National Ready Mixed Concrete Association**  
**900 Spring Street**  
**Silver Spring, MD 20910**  
**(240) 485-1154**

I have been selected by NRMCA to serve as a member of the Certification Committee for the NRMCA Pervious Concrete Contractor Certification Program.

My term of membership is currently set to expire on (date) \_\_\_\_\_

Name \_\_\_\_\_  
Employer \_\_\_\_\_  
Address \_\_\_\_\_  
City, ST, ZIP \_\_\_\_\_  
Phone/Fax \_\_\_\_\_  
Cell Phone/E-mail \_\_\_\_\_

I best represent the following interest group (select 1) :

Contractors  Concrete Producers  Design Professionals  Other (specify) \_\_\_\_\_

Summary of my education / experience qualifications:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I HEREBY PLEDGE that as NRMCA Certification Committee member who is involved in administrating the **NRMCA Pervious Concrete Contractor Certification Program**, that I understand the certification policies and procedures and will maintain the ethical and professional integrity of the certification program. I will immediately notify NRMCA if I discover that I no longer meet the requirements of the certification policies and procedures for whatever reason. I understand NRMCA may revoke my Certification Committee status if I do not meet the certification policies and procedures.

Signed \_\_\_\_\_ Date \_\_\_\_\_

## **NRMCA Pervious Concrete Contractor Certification Local Sponsoring Group Recommended Procedures**

### **Introduction**

The purpose of this document is to offer guidance to Local Sponsoring Groups that will sponsor NRMCA's Pervious Concrete Contractor Certification Program. In a perfect world, this would be a complete cookbook on how to run the program, but respecting local differences, this is more of a broad recommendation than a step-by-step guide.

As a first step, please review the Certification Policy of the program. The document lays out the Pervious Concrete Contractor Certification structure, rules, and responsibilities, as they relate to all parties involved. If you have any questions, please feel free to contact NRMCA Certification Department staff at any time. Although not a requirement of the program or for certification, it is recommended that a Local Sponsoring Group plan for a training session when they plan on offering a certification program. The training session should include both classroom time and demonstration of placement of pervious concrete. At the same time, the demonstration can be used to conduct a performance evaluation for those seeking Installer or Craftsman certification.

As a Local Sponsoring Group, your first step is to form a certification committee to oversee the program's administration. If your group is an industry association, then your committee will be made up of interested members. The certification committee will work with your staff to schedule certification sessions, generate attendees, and coordinate logistics for the training, demonstration, written examination and performance evaluation. Staff will handle paperwork, advertising, coordinating space, and communicating with NRMCA staff.

Once your group completes that process, please submit the appropriate forms to NRMCA. Those forms are:

Form PCC1: Sponsoring Group Application

Form PCC2: Certification Committee Member Qualification Statement, and

PCC3: Examiner Application

### **Setting up a program**

There is a lot of work to set up a Pervious Concrete Contractor Certification program. As already mentioned, a coordinated effort between the committee and staff, planned well in advance, can help make the process run smoothly. To help your planning, Table 1 summarizes your key tasks.

Many of these steps will not apply if you only plan to offer the written examination.

There are several elements for your committee members to consider when figuring what to charge each attendee per session. Your group's costs will include the cost for the NRMCA text, written examination, performance evaluation, your staff time, speakers, examiners, supplemental examiners, proctors, the demonstration, concrete, rented space, and possibly food and beverage. To save your group's expenses and keep the cost of the certification reasonable for attendees, consider finding volunteers and sponsors to help carry as much of the load as possible. And remember, not all of these elements will apply each time you conduct a session so we recommend calculating hosting costs and attendee's certification fees in component parts.

The first step is to select a time frame to hold the program. Prototypes not only ran successfully as one-day sessions, but also as Friday afternoon/Saturday morning sessions. Your sponsoring group has a feel for your local market and the schedules the contractors like to keep. The best advice is to work around the typical contractor's schedule. The schedule for a typical session might look like the schedule presented in Table 2.

**Table 1: Example Schedule of Tasks for Each Session**

3 Months	2 Months	1 Month	2 Weeks	1 Week	Day After
Schedule Date	Release Ads	Order Exams from NRMCA	Check Exams	Order Concrete for Demo/Exams	Mail Exams to NRMCA
Coordinate Classroom Space	Order Books Find and price caterer (if needed)	Confirm registration with attendees and Mail Out Books	Confirm Speaker	Order Catering (if needed)	
Coordinate Demo/Exam Space		Mail Out Tool/Equipment Lists to attendees	Confirm Demo Crew		
Prepare Ads		Coordinate A/V. Order (if needed)	Confirm Proctors and Examiners		
Schedule Examiners					
Schedule Speakers					
Schedule Proctors					
Coordinate Demo Crew					

**Table 2: Example Schedule for an Examination Session**

Technicians and Craftsmen			Craftsmen Only			
Friday			Saturday			
1:00pm	2:30pm	6:00pm	8:00	10:00	10:30	12:30
Demonstration	Classroom Training Session Begins	Classroom Training Session Ends	Written Exam Begins	Written Exam Ends	Performance Evaluation Begins	Performance Evaluation Ends

Pervious Concrete Contractor Certification can be administered not only to contractors but many other job categories, including municipal and private inspectors, concrete producer quality control technicians or technical service managers, drivers, batchmen, engineers, architects, and testing lab personnel. Therefore, when scheduling sessions, remember the market for Technicians will probably be bigger than the market for Installers and Craftsmen, so try to schedule sessions with Technicians in mind, too. Designing a marketing piece for the Pervious Concrete Contractor Certification should start at least three months from the date of the program because whatever advertising medium you choose, it will take time to put it together. Advertising should hit your intended audience two months before the program date.

As each attendee registers with your organization, he/she should promptly be sent a copy of the craftsman text, with an accompanying note asking the person to begin reviewing before the program session. Additionally, tool and equipment lists should be sent to those seeking Installer or Craftsman certification. Your registration form should explain the three certification options as described in the Certification Policies. The form should have a place for the attendee to indicate whether he/she is seeking Technician, Installer, or Craftsman level certification.

**Classroom Training Session**

While not required for certification, it is recommended that your sponsoring group conduct a classroom review session in advance of administering a written examination and/or performance evaluation. The session should be conducted by a pervious concrete expert who can share his knowledge with those seeking certification. NRMCA has PowerPoint presentations that may be used to guide a three to four hour workshop. The presentation covers the critical information presented in the textbook. Additionally, if

your group would like to confer continuing education units (CEUs), this review session may be the opportunity to do so.

When planning for the space to hold a classroom review session, consider an area that is large enough to spread out all registered attendees during the written examination portion of the program. In prototype programs, both corporate conference rooms and rented hotel conference rooms were used successfully. The classroom A/V needs will depend on the size of the group to be certified. For a small group, the list might include simply a laptop, LCD projector, and screen. For a bigger group microphones and laser pointers should be added to the list.

The speaker for the classroom session should be your local expert on pervious concrete or a team of experts. This team might include contractors, engineers, or industry association staff. If you don't have local experts, NRMCA's staff can help you locate experts that might travel to your area. Keep in mind that the Certification Policy does not allow the Examiner to provide training for a certification written examination session of performance evaluation session he is administering.

### **Demonstration Session**

The demonstration session is not a mandatory part of the program but should be included. Since pervious concrete is relatively new to contractors who might do conventional flatwork, it is important to organize a demonstration session to ensure they know the procedures that are unique to pervious concrete installation. Many procedures used in placing and finishing conventional flatwork should not be used in pervious concrete placements. The demonstration session is time for an expert in the field of placing and finishing pervious concrete to share his knowledge with those seeking certification.

The demonstration session is typically held wherever the performance evaluation will be conducted. Either may be held anywhere that has room (or need) for pervious concrete – such as your office, a concrete producer's yard, or existing construction site. In general, a certified Installer or Craftsman should conduct the demonstration. If there are no certified Installers or Craftsmen in your area, experienced Technicians may be utilized.

Common sense should prevail when selecting a site for the demonstration and performance evaluation. The site should be large enough for each crew to set up their forms and maneuver a ready mixed concrete truck easily. There should be no problem holding the session at a concrete producer's yard. When considering other locations, please give thought to the fact that examinees might not place the best piece of pervious concrete during their performance evaluation. Care should be taken to select a site that can tolerate a bad piece of pervious concrete without giving the industry a black eye. Simply select a site where the pavement cast during the evaluation can be easily removed if necessary.

Safety should be a primary concern when conducting the demonstration. All attendees should be notified when they initially register that they will need to bring appropriate safety gear to wear during the demonstration, including: hard hats, safety glasses, chemical resistant safety gloves, long pants, long sleeved shirts and steeled toed shoes or boots.

Selecting the suppliers for the demonstration should be done when the date of the session is selected (wouldn't want to schedule a Saturday demo only to find out no concrete plants are open on Saturday.) The laborer supplier for the demonstration should make sure he has his best crew available for the demo. The concrete supplier should also have experience batching pervious concrete. There's nothing worse than bringing out a load of concrete for a demonstration that's not batched properly or having a crew that doesn't know what they're doing.

When conducting the demonstration, the speaker should be familiar with the checklist that will be used to evaluate those taking the performance evaluation so that he can highlight those points as the crew performs each task. Additionally, the crew should be made aware of all of the points on the checklist so that they actually demonstrate each required element of installing a pervious concrete pavement. (See Form PCC10.)

### **Written Examination**

For a detailed list of instructions, please see Form PPC4 "Examiner Step-by-Step Instructions." Each examinee must sign in before the exam. The examiner also signs the sheet at the end of the exam, noting

that all the exam pieces are turned in and the specific numbered exam components are in order. Please see Form PCC6: Written Exam Sign-in/Sign-Out Sheet.

To highlight the key components of the written examination process, please note that each examinee will receive two items, (1) an exam booklet and (2) a Scantron answer sheet. There are several different versions of the written exam; the version of the exam will be indicated on the exam cover. Examinees should be given a different version of the exam than the person sitting next to them.

Supplemental Examiners and Proctors may be used to help administer the written exam. They must meet the qualification mentioned in the Certification Policy. Questions may not be clarified or commented on by the Examiner, Supplemental Examiners, or Proctors. The exam is a timed test; each examinee gets two (2) hours to complete the exam. If an examinee cannot read the questions, the exam may be administered orally, with a notation made by the Examiner and signed by the Examiner on the test book cover.

It's probably a good idea for the Local Sponsoring Group to have supplies available for the examinees to help them take the exams. These might include #2 pencils, scratch paper, and erasers. If your budget allows, coffee and donuts might be appropriate too.

### **Performance Evaluation**

For those taking the performance evaluation the examiner should pass out Form PCC10 along with Form PCC8 for Installer candidates and Form PCC9 for Craftsman candidates. The performance evaluation should be administered to individuals working together as a crew. The individuals may normally work together or be from different organizations. Either way, there must be at least a four-man crew to conduct the performance evaluation. As the examinees go through the evaluation process, they should rotate positions so that each examinee completes each element on the performance evaluation checklist. To help the examiner proctor all this, there should be a supplemental examiner for each examinee.

Safety is of critical importance in this process. Everybody involved must have the appropriate safety gear including hard hats, safety glasses, chemical resistant gloves, long pants, long sleeved shirts, and steel-toed shoes or boots. Each examinee must be made aware of the safety rules at the time of registration.

The examinees will typically be REQUIRED to bring their own tools and equipment to the performance evaluation. This includes forms, screed, roller, jointer, and curing materials. A tool and equipment list should be sent to each examinee when they register so that they know what they have to bring for the performance evaluation. The Local Sponsoring Group may choose the option of providing the needed tools and equipment for the performance evaluation.

### **Individual Results**

Written examination and performance evaluations should be sent back no later than the next business day to NRMCA Certification Department for processing. Each examinee's exam materials should be kept together. Do not organize booklets, scanner sheets, and forms into separate stacks. Carefully repackage all materials and send via tracked delivery (such as UPS, FedEx, or DHL).

Exams will be graded within four weeks. Examination results will be sent to the examinee along with a certificate for those who pass directly from the NRMCA Certification Department. Pass/fail status of all the examinees in the session will be sent to the Examiner and the principal of the Local Sponsoring Group.

## **NRMCA Pervious Concrete Contractor Certification Examinee Required Personal Protection Equipment**

Each attendee must bring the following Personal Protection Equipment for the Demonstration Session and/or Performance Evaluation

Equipment:

- Hard Hat
- Safety Glasses
- Steeled toed shoes or boots
- Chemical Resistant Safety Gloves
- Long Pants
- Shirt WITH long sleeves

## **NRMCA Pervious Concrete Contractor Certification Examinee Required Equipment**

Each examinee must bring the following equipment for the Performance Evaluation:

- Screed\*
- Roller (10" Schedule 40 Steel Pipe)\*
- Pizza Cutter (6" Schedule 40, with center flange)
- Rakes
- Square Nose Shovels
- Hand Floats
- Edgers
- 6 mil Polypropylene Sheet
- Spray Can with Vegetable Oil
- String Line
- Forms and tools and equipment to set forms
- Riser Strips and tools and equipment to place riser strips\*

\* Note: Some examinees may chose to use a motorized roller creed that replaces the need for separate screed, manual roller, and riser strip.