

National Ready Mixed Concrete Association

NRMCA Pervious Concrete Contractor Certification Program Policies and Procedures

September 2018



© Copyright 2018 by the National Ready Mixed Concrete Association
All Rights Reserved

NRMCA Pervious Concrete Contractor Certification
Policies and Procedures Manual
Table of Contents

SECTION	PAGE
Program Summary	PS-1
Certification Policy	PS-1
Form PCC1 – Local Sponsoring Group Application	PCC1-1
Form PCC2 – LSG Certification Committee Member Qualification Statement	PCC2-1
Form PCC3 – Examiner Application	PCC3-1
Form PCC4 – Examiner Step-by-Step Instructions	PCC4-1
Form PCC5 - Written Exam Sign-in / Sign-out Sheet	PCC5-1
Form PCC6 – Post Examination Report	PCC6-1
Form PCC7 – Examination Material Checklist	PCC7-1
Form PCC8 – Installer Application	PCC8-1
Form PCC9 – Installer Recertification Application	PCC9-1
Form PCC10 – Craftsman Application	PCC10-1
Form PCC11 – Craftsman Recertification Application	PCC11-1
Form PCC12 – Performance Evaluation	PCC12-1
Form PCC13 – Certification Session Order Form	PCC13-1
Form PCC14 – Payment Form	PCC14-1
Form PCC15 – NRMCA Ethics Statement	PCC15-1
Form PCC 16 – Session Results	PCC16-1
Local Sponsoring Group Recommended Procedures	RP-1

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)

\$50.00 (list \$70) plus shipping for the Pervious Concrete Contractor Certification textbook.

\$110.00 Written Examination plus shipping

\$25.00 Installer Application

\$25.00 Installer Recertification Application

\$25.00 Craftsman Application

\$25.00 Craftsman Recertification Application

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

\$40.00 for materials being shipped overnight and 2-day

\$15.00 per reprint/additional copies of certificate

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 PCC12
 - C. Provide project experience documentation of successful construction of a minimum of 3 projects with a total area exceeding 10,000 square feet (1000 m²) – 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 PCC12 and PCC10, respectively
OR
 - b. **OPTION B:** Provide documentation of work experience constructing pervious concrete pavements exceeding 3000 hours – Form PCC10.
 - 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 PCC12).
- 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. Applicant's participation in a pervious concrete demonstration or hands-on training may only count for one (1) of the three (three) required projects. Projects used in a demonstration but where the pervious pavement is used in actual service for public use would not be considered a demonstration project for this limitation
- 2.21 Applicants for Craftsman certification shall complete Form PCC10 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 NRMCA. 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 2 individuals selected by NRMCA 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 review panel 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.
- 5.13 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 individually 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 establish an ad hoc task group or panel as needed to establish policy, review challenges, consider revoking certifications, or make revisions to the program, as needed. The panel shall be comprised of practicing pervious concrete contractors or other knowledgeable on pervious concrete technology. The size of the panel can vary in size as determined by NRMCA.
- 7.2 NRMCA shall approve the Local Sponsoring Group.
- 7.3 NRMCA shall approve examiners.
- 7.4 NRMCA shall authorize the Local Sponsoring Group to conduct examination sessions for Pervious Concrete Technician, Installer, and Craftsman certifications.

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 1st 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 1st time Installer and Craftsmen candidates, or re-tests or re-certifications for Installer and Craftsmen candidatesNote that many of the referenced forms are posted on the NRMCA website – 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 PCC13.
 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 (703) 706-4854.
 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)
 - PCC10 Craftsman Application and spreadsheet to document work experience – one for each Craftsman candidate (upon request)
 - PCC12 Performance Evaluation – one for each Installer and Craftsman candidate (upon request)**UPS Return Slip**
- 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 PCC10 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. Identification #: located on the top right corner of the exam
 - b. Name: examinee's last name, and first 6 letters of examinee's first name
 - c. Address where the individual would like to receive his/her results
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 PCC10 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 PCC12 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. **Return the following within three to five business days of completing the exam session**
 - 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. Ship to NRMCA via **UPS Return slip:**

**NRMCA Certification Department
National Ready Mixed Concrete Association
66 Canal Center Plaza, Suite 250
Alexandria, VA 22314
(703 706-4854**

**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 \$110 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

_____ **UPS Return Slip**

	NUMBER SHIPPED	NUMBER RECEIVED	NUMBER USED AND RETURNED	NUMBER NOT USED & RETURNED
Textbooks				
Written Examinations				
Scantron answer sheets				
PCC8 Installer Applications			NA	NA
PCC10 Craftsman Applications			NA	NA
PCC12 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 within three to five business days of completing the exam session via the enclosed UPS return slip:

**NRMCA Certification Department
National Ready Mixed Concrete Association
66 Canal Center Plaza, Suite 250
Alexandria, VA 22314
(703) 706-4854**

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 m²).

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 ft² (1000 m²) of constructed area. Document more projects as necessary to meet or exceed 10,000 ft² total constructed area. Please document project experience below.

Project Location (Name, Address)	Constructed Area (ft ² or m ²)	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
66 Canal Center Plaza, Suite 250
Alexandria, VA 22314
(703) 706-4854
Email: sdickens@nrmca.org
Fax: (301) 920-2556

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.

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 Installer Re-Certification Application

ALL **Installer** re-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 Re-Certification Criteria

1. Pass the NRMCA Pervious Concrete Contractor Written Examination with a 75% score or greater.
2. Provide documentation of successful construction of a minimum of 3 projects with a total area exceeding 10,000 square feet (1000 m²) since the date of previous submission.

Installer Re-Certification Application Instructions

1. **Installer** applicants must complete Sections A, B and C 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 C by completing Section D and mailing this form directly to the NRMCA Certification Department.

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

Name _____
(as it appears on previous certification)
 Employer _____
 Address _____
 City, ST, ZIP _____
 E-Mail _____

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

Date of NRMCA Pervious Contractor Certification Written Examination _____
 Location and Local Sponsoring Group _____
 Expiration Date _____ Certification ID _____

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

Document a minimum of 3 projects totaling at least 10,000 ft² (1000 m²) of constructed area since the date of previous submission. Please document project experience below.

Project Location (Name, Address)	Constructed Area (ft ² or m ²)	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 D – to be completed by the principal of the Local Sponsoring Group

Instruction to principal of the Local Sponsoring Group

4. Review all of the information provided by the applicant in SECTION C. 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 C 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 D.**

5. Return the completed form to:
NRMCA Certification Department
National Ready Mixed Concrete Association
66 Canal Center Plaza, Suite 250
Alexandria, VA 22314
(703) 706-4854
Email: sdickens@nrmca.org
Fax: (301) 920-2556

I have reviewed the project information in SECTION C and 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 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
66 Canal Center Plaza, Suite 250
Alexandria, VA 22314
(703) 706-4854
Email: sdickens@nrmca.org
Fax: (301) 920-2556

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 PCC11 NRMCA Pervious Concrete Contractor Certification Craftsman Re-Certification Application

ALL **Craftsman** re-certification applicants must fill out this form to verify their work experience performing pervious 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. Submit documentation of work experience hours of at least an average of 40 hours per year since the previous submission of work experience (not the date of the test).

Craftsman Application Instructions

1. **Craftsman** re-certification applicants must complete Sections A, B, and C 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 C by completing Section D and mailing this form directly to the NRMCA Certification Department.

SECTION A – to be completed by Craftsman re-certification applicants

Name _____
 Address _____
 City, ST, ZIP _____
 E-Mail _____
 Employer _____

SECTION B – to be completed by Craftsman re-certification applicants

List your ACI Concrete Flatwork Technician or Craftsman Certification expiration date _____

SECTION C – to be completed by Craftsman re-certification applicants

Date of NRMCA Pervious Contractor Certification Written Examination _____

Location and Local Sponsoring Group _____

Expiration Date _____ Certification ID _____

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

6. Verify that the applicant has a current ACI Flatwork Finisher Certification card as in SECTION B
7. 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 C 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 D.**
8. **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.
9. Return the completed form to:
NRMCA Certification Department
National Ready Mixed Concrete Association
66 Canal Center Plaza, Suite 250
Alexandria, VA 22314
(703) 706-4854
Email: sdickens@nrmca.org
Fax: (301) 920-2556

Form PCC12
NRMCA Pervious Concrete Contractor Certification
Performance Evaluation

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: _____

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.

Examiner Name (Print) : _____

Examiner Signature: _____ Date: _____

Examiner Comments: _____

OVERALL GRADE ON PERFORMANCE EVALUATION
 PASS FAIL



ITEM	PERFORMANCE ITEMS	PASS (P) OR FAIL (F)	
		1 st Try	2 nd 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"> • Hand screed or mechanical roller screed • Pan float • Pervious cross roller or other finishing tool, as needed • Pervious jointing tool or saw • Rakes or spreaders • Square nose shovels • Hand floats • Edgers • 6 mil polypropylene sheet • Spray can with approved surface treatments; oils/stabilizers • String line • Forms and tools and equipment to set forms • Appropriate cleaning tools needed during placement <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"> • Hard hat • Safety glasses • Steeled toed shoes or boots • Chemical resistant safety gloves • Appropriate clothing 		
3	<p>Did examinee verify adequacy of the subgrade before placement of concrete?</p> <ul style="list-style-type: none"> • Compaction • Free of all foreign matter • Uniformity of subgrade surface • Moistened but with no standing water 		
4	<p>Were edges correctly compacted?</p> <ul style="list-style-type: none"> • Did they use a tool to compact edges or step in the mix with their boot? • Was the compaction adequate to prevent raveling? • After tooling were edges at top of form? If not did they fill and re-edge? • Were the edges and deep grooves smooth or did they torn or ragged appearance? 		
5	Were the joint locations (if used) marked on the forms		
6	Did examinee inspect pervious concrete for consistency and adequate aggregate surface coating before placing concrete?		
7	<p>Was discharge, spreading, and strike-off completed in a rapid and consistent manner?</p> <ul style="list-style-type: none"> • Did the crew place and screed the material fast enough to complete all edging, jointing and compaction while the mix was still workable? 		
8	Were wheel ruts or other flaws on the prepared subgrade surface re-graded?		

ITEM	PERFORMANCE ITEMS	PASS (P) OR FAIL (F)	
		1 st Try	2 nd Try
9	<p>If a wooden strike off tool was used, was the strike off operation conducted in an appropriate motion to obtain the desired surface?</p> <p>If mechanical roller screed was used, was a “head” of material kept in front of the screed?</p> <p>Was a pan float used in a proper manner to prevent sealing of the surface and voids properly filled?</p>		
10	Was level of fresh concrete kept above the level of forms before using strike off device to reduce surface defects?		
11	Did examinee correct excessively high or low areas prior to compaction?		
12	<p>Was compaction performed in a rapid and consistent manner?</p> <p>Were cross roller (if used) marks worked out from the surface with an appropriate tool before concrete stiffened? Was this done without sealing the surface?</p>		
15	Did examinee clean the roller to prevent buildup on the roller (if applicable)?		
16	Was surface of the pervious concrete compacted to a uniform grade?		
17	Was jointing performed to an acceptable depth and alignment? Similar consideration for saw cut joints.		
18	Was the concrete kept moist during all operations?		
19	Was the compacted pavement adequately covered with curing sheets anchored for curing promptly after placement?		
20	Did the installer work with the concrete supplier prior to the pour to make sure the mix design meets job specification; aggregate size and shape, cement content, permeability?		
23	Did the installer have a good understanding of the required consistency of the pervious concrete discharged to ensure proper placement?		

Form PCC13 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.

Local Sponsoring Group _____

Name of Person Placing Order _____

Mailing Address _____

City, ST, ZIP _____

Business Phone _____

E-Mail Address _____

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		@ \$50 each ¹	
Written Examinations		@ \$110 each ²	
PCC12: Performance Evaluations		No charge ³	
PCC8: Installer Applications		No charge ³	
PCC10: Craftsman Applications		No charge ³	
		TOTAL:	

1. Textbooks are mailed UPS Ground (3-5 business days) upon receipt of your order and payment. **If you require textbooks more quickly than this because you ordered materials too late for the express shipping fee will be added to the cost.** Payments must be received prior to shipping the textbooks.
2. 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, within three to five business days of 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).**
3. 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 PCC10 for details).
4. A \$25.00 expedited fee is charged for those requesting results within five business days.

Signature of Person Placing Order: _____ Date: _____

1. Order by fax by completing this form and faxing it to NRMCA Certification Department at (301) 920-2556.
2. Order by e-mail by completing this form e-mailing it to SDickens@nrmca.org.



Form PCC14 NRMCA Pervious Concrete Contractor Certification Certification Payment Form

This form must accompany the Pervious Concrete Contractor Certification Order Form – PCC13. NRMCA will not invoice for Pervious Concrete Contractor Certification Textbooks, certificate reprints, Installer or Craftsman application submittals. Textbooks, certificate reprints, Installer or Craftsman certifications will only be shipped after payment is received.

Local Sponsoring Group _____

Name _____

Date _____

ITEM	NUMBER REQUESTED	PRICE	SUB-TOTAL
Textbook(s)		@ \$50 each	
Written Examination(s)		@ \$110 each	
PCC8: Installer Application(s)		@ \$25.00 each	
PCC9: Installer Recertification Application(s)		@ \$25.00 each	
PCC10: Craftsman Application(s)		@ \$ 25.00 each	
PCC11: Craftsman Recertification Application(s)		@ \$25.00 each	
Certificate(s) Reprint		@ \$15.00 each	
Expedited Results		@ \$25.00 each	
Expedited Shipping		@ \$40.00 each	
		TOTAL:	

PAJMENT METHOD

American Express
 Master Card
 Visa
 Check

If submitting payment via check, materials will not be shipped until payment is received. Checks should be made payable to NRMCA.

Credit Card Number: _____ Expiration Date: _____

Name on Credit Card: _____

I hereby authorize NRMCA to charge the amount above to the listed credit card:

The completed Payment and Order form should be sent via one of the following methods:

Email: sdickens@nrmca.org

Fax: (301) 920-2556

Mail: NRMCA Certification Department
 National Ready Mixed Concrete Association
 66 Canal Center Plaza, Suite 250
 Alexandria, VA 22314
 (703) 706-4854



Form PCC15
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 _____

EXAMPLE
NRMCA Certification Session Results
National Ready Mixed Concrete Association
Report Date: May 1, 2018

Session Details:

Exam Date: April 1, 2018
 Exam Location: Silver Spring, Maryland
 Examiner: Colin Lobo
 Proctor/Supplemental Examiner: N/A
 Expiration Date: March 31, 2018
 Performance Evaluation Date: N/A

Overall Exam Results:

Total Examinees: 3
 Exams Passed: 3
 Exams Failed: 0
 Average Score: 92%

Examinees	Cert ID	Designation
Lionel Lemay	601288	Certified Pervious Concrete Technician Performance Evaluation N/A
Karthik Obla	679800	Certified Pervious Concrete Technician Performance Evaluation N/A
Gary Mullings	612577	Certified Pervious Concrete Technician Performance Evaluation N/A

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

Form 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 PCC12.)

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 PCC12 along with Form PCC8 for Installer candidates and Form PCC10 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.