

ACI Shotcrete Nozzleman Certification Procedures for Sponsoring Groups, Hosts and Candidates

1 - Introduction

This document describes the responsibilities of and relationship between ACI, its Shotcrete Nozzleman Certification Sponsoring Groups, the “Hosts” of Exam Sessions, and Certification Candidates.

Shotcrete Nozzleman Certification sessions are typically organized through the participation of “Hosts.” Hosts may make the certification session available to the public, but typically keep them private (“in-house”) for their own employees. The Host shall have no relationship with the session Examiner that is prohibited by the ACI Policy for ACI Certification of Shotcrete Nozzlemen (excerpted to Section 2.7 *Conflict-of-Interest* of this document).

2 - Definitions

2.1 Sponsoring Group: The entity identified by ACI as their agent in administering the ACI Shotcrete Nozzleman Certification program according to established ACI policy.

2.2 Host: The Host is the organization, group or individual in charge of planning and coordinating the facility for the certification session. The Host could be a consultant, contractor, association, union, etc...

2.3 Organizer: The single person identified by the Host as the coordinating contact for ACI, the Sponsoring Group and the Examiner.

2.4 Examiner: Individuals approved by ACI as Examiners, appointed by the Sponsoring Group to its roster of Examiners to fulfill all Examiner duties of a session.

2.5 Candidates: Individuals pursuing certification; Candidates become Participants when their Work Experience is verified by the Examiner.

2.6 Participants: Individuals pursuing certification who have been cleared to participate in the performance exam by Examiner verification of their work experience.

2.7 Conflict of Interest: Examiners, Supplemental Examiners, and Proctors must recuse themselves from any conflict-of-interest situation while acting as agents of ACI in conducting exam sessions. This includes but is not limited to the following conditions:

- A) Examiners, supplemental examiners, and proctors shall not be professionally or personally related to the Host, its parent or subsidiaries, or examinees at the time of the exam session.
- B) Examiners and supplemental examiners shall not be employed by the same organization (including parent or subsidiaries) as any of the examinees at the time of the exam session.
- C) Examiners, supplemental examiners, and their employers shall not be in a business relationship with the Host, its parent or any subsidiaries at the time of the exam session.
- D) Examiners, supplemental examiners, and their employers shall not be in a business relationship on any project that the Host, its parent, or any subsidiaries have a business relationship at the time of, and six (6) months prior to, the exam session.

ACI reserves the right to determine if a conflict of interest exists.

2.8 ACI Shotcrete Nozzleman Certification Program Policies: The ACI Shotcrete Nozzleman program policies were created and are maintained by ACI Committee C 660 – *Shotcrete Nozzleman Certification*. The program policies are the ultimate authority in conduct and operation of the ACI Shotcrete Nozzleman Certification program. The policies can be found at <http://www.concrete.org/Certification/pdf/scn.pdf>.

2.9 ACI Examiner/Host Relationship Disclosure Form (Appendix A): A form that documents the relationship between the Examiner and the Host. Completion and signing of the form, and review and approval by the Sponsoring Group (i.e., the Sponsoring Group determines that no conflict-of-interest relationship exists between the Examiner and Host), is required before an order for exam materials is placed with ACI.

3 - Responsibilities

3.1 Host Responsibilities: The Host is in charge of naming an Organizer who will serve as the Host's agent/representative throughout the certification process. The Host is responsible for all safety aspects related to the certification process. The Host is responsible for payment of the fees and expenses related to the Certification session. All fees and expenses will be billed through the Sponsoring Group at the established standard rates. The Host must provide completed certification Work Experience forms, materials, and equipment for certification as well as a safe working area for the examinations. The Host is also responsible for the extraction of the required cores (under Examiner supervision) from each Participant's test panels. A complete listing of Host responsibilities can be found on *the Host Responsibilities Checklist and Acknowledgement (Appendix B)*.

3.1.1 The Host must provide a current certificate of insurance to Sponsoring Group staff prior to the certification session. The Host's insurance must include general liability insurance with a minimum of one (1) million dollars coverage per occurrence.

3.1.2 The Host must provide to Sponsoring Group staff prior to the session, a certificate of Workman's Compensation Insurance for all participants in the session.

3.1.3 The Host must complete and submit the *Host Responsibilities Checklist and Acknowledgement (Appendix B)*.

3.2 Organizer Responsibilities: The Organizer coordinates with the Examiner to properly execute all Host responsibilities, including ensuring that the Host's exam venue is properly prepared for the exam session (e.g., materials, equipment, and presence of the Participants).

3.3 Candidate Responsibilities: The Candidate is responsible for completing and signing their prerequisite 500 hours of nozzleman experience on an ACI Work Experience form. Candidates are also required to participate in a brief conversation with the Examiner as part of the ACI Work Experience evaluation. The completed form(s) must be submitted to the Host's Organizer for final review, signature, and submission to the Sponsoring Group. Intentional falsification of work experience documentation may result in invalidation of the session examinations, forfeiture of fees, and legal action.

3.4 Participant Responsibilities: Attend the ACI Certification exams.

3.5 Sponsoring Group responsibilities: The Sponsoring Group is responsible for all fees for exam processing, reporting, and issuance of credentials charged by ACI, and for billing Hosts for all Sponsoring Group costs incurred related to the execution of the examination sessions. The Sponsoring Group will coordinate all session details between the Host's Organizer, the session Examiner, and ACI. The Sponsoring Group is solely responsible for assigning the Examiner for the examination session. The Sponsoring Group will handle all financial transactions related to the examination session, including payment to the Examiner for services rendered. The Sponsoring Group fields the initial

request from the potential Host, gathers the session information, and coordinates distribution and processing of all paperwork to ensure all requirements (e.g., conflict of interest met prior to the exam session). An overview of the process for administering an ACI Shotcrete Nozzleman examination session is reflected in Appendix D.

3.6 Examiner Responsibilities

3.6.1 ACI Examiner/Host Relationship Disclosure Form: The Examiner is required to complete, sign, and submit to the Sponsoring Group for review the *ACI Examiner/Host Relationship Disclosure Form*. The Examiner is responsible for notifying the Sponsoring Group if at any point they realize that their relationship with the Host and/or Candidates is a conflict-of-interest relationship as defined in Section 2.7.

3.6.2 ACI Shotcrete Nozzleman Certification Program Policies: The Examiner's responsibilities are described in the *ACI Certification Policies for Shotcrete Nozzlemen*, which was created and is maintained by ACI C 660 and approved by the ACI Certification Programs Committee: these include marking the performance exam, grading the cores and supervising the written exam.

3.6.3 Verification of Participant's Work Experience: The Examiner will receive copies of each Candidate's Work Experience Form(s) from Sponsoring Group. An Examiner's evaluation of a Candidate's Work Experience consists of two separate steps:

Step #1: The Examiner must review the information submitted on the Candidate's Work Experience Form for completeness and feasibility.

Step #2: The Examiner must speak directly with the Participant prior to approving and signing the Candidate's Work Experience Form. The complete content and length of the Examiner's interview with the Candidate is left to the Examiner's judgment and discretion in deciding if, in their opinion, the Candidate possesses the required minimum amount of work experience. Every Candidate interview must however include the following:

- The identity of the Candidate.
- Discussion of any items on the Candidate's Work Experience Form that seem incomplete, unclear, or not feasible.
- Discussion on the Candidate's nozzleman experience, including how long they have been a nozzleman, the type of projects in which they have been involved, and the type of equipment they have used.

Once the Examiner is satisfied with the accuracy of the information on each Candidate's Work Experience Form(s) and that a minimum of 500 hours as a nozzleman has been verified, the Examiner must sign and date the Candidate's Work Experience Form(s) and return the signed forms to the Sponsoring Group.

Regardless of a Candidate meeting the Work Experience prerequisite, if at any point during the performance examination the Examiner witnesses Candidate's actions that are unsafe, the Examiner must discontinue the performance examination of that Candidate, mark the performance exam at the step at which the action was witnessed, and direct the Candidate to leave the examination area.

3.6.4 Examiner Arrival at the Examination Session: Examiners must confirm that all required exam venues, equipment and materials are available and conform to *ACI Certification Policies for Shotcrete Nozzlemen* prior to beginning the exam session. If any items are missing, incomplete, or not functioning properly, the Examiner must suspend beginning the session and notify the Organizer/Host immediately.

The Examiner must also check photo Identification of each Candidate and confirm that each has been properly admitted to the examination session (i.e., are identified as having been interviewed and their work experience verified).

3.6.5 Required documentation of Performance Exams: The Examiner must take photos of each Candidate (face shot), the back of each test panel after stripping, and the Candidate's cores. The mix design should also be documented and submitted to ACI.

3.6.6 Return of Session Materials: The Examiner must ship all session materials to the Sponsoring Group for final review and organization via a traceable method of shipping. The Sponsoring Group will then forward the completed examination documents to ACI for processing.

3.6.7 Examiner Compensation: The session Examiner must ensure that he will accept compensation for time and expenses related to the certification session only from the Sponsoring Group. The Examiner will under no circumstances directly invoice the Host nor accept payment of any kind, including non-monetary, from the Organizer/Host.

3.6.8 Examiner Personal Conduct Guidelines: The Examiner must refrain from promoting their employer or any organization with which they are affiliated (except for ACI), or those entities products or services during the ACI examination process.

A summary document: *Procedures for Planning, Preparation, and Execution of an ACI Shotcrete Nozzleman Certification Exam Session* can be found in **Appendix D**.

4 - Review of sessions: ACI may review any ACI examination session to ensure conformance to ACI certification policies and a proper testing environment has been provided. Selection for review of sessions is at the discretion of ACI.

Reviews are conducted according to the Review Checklist assembled by ACI Committee C 660.

Appendix A
ACI Examiner/Host Relationship Disclosure Form

Session Information

Scheduled Begin Date: _____ Scheduled End Date: _____

Host: _____

Session Location: _____

Wet or Dry Mix: _____

The following is a declaration of the Examiner's relationship with the Host and must be completed by the Examiner, submitted to the Sponsoring Group and forwarded to ACI with the exam session materials.

Note: Not all relationships constitute a Conflict or Interest. ACI reserves the ultimate determination in assessing if a conflict of interest exists.

Are you personally related to the Host or any of the Certification Candidates? *(If Yes, please explain)*

Are you currently or have you ever been employed by the Host organization or any of its parent or subsidiary organizations? *(If Yes, please explain)*

Are you currently in a business relationship with the Host or any of its parent or subsidiary organizations? *(If Yes, please explain)*

Are you currently, or in the 6 months prior to the scheduled exam date, in a business relationship on the same project as the Host, its parent, or any subsidiaries? *(If Yes, please explain)*

By completing and submitting this form, I am providing the Sponsoring Group with information to determine if a conflict-of-interest relationship exists between me, the Host or the Candidates that would preclude my ability to administer ACI Certification exams in compliance with ACI Policies. I assure that the answers provided on this form are complete and accurate to the best of my knowledge.

Examiner Signature: _____

Date: _____ Examiner Name: _____

Please return this completed form to the Sponsoring Group Staff

Appendix B

Host Responsibilities Checklist and Acknowledgement

General

- Communicate Certification session needs\parameters to ACI Sponsoring Group (SG) Staff, including:
 - Number of candidates
 - Method sought (wet- or dry-mix)
 - Language(s) of Candidates and any need for translators
 - Roster/ID Numbers of Candidates Recertifying
 - Requests for oral examination on the written exam
 - Requests for special accommodation under the Americans with Disabilities Act (ADA)
- Communicate to SG staff if you are willing to open the session to the public (the Host retains final approval of all Candidates' participation in the session)

Work Experience

- Initiate completion of each Candidate's *Work Experience Form(s)*, verify their accuracy, sign each form and return all completed forms directly to SG Staff.
- Ensure that each Candidate is available to speak directly with the session Examiner as part of the verification of their work experience. If an interpreter is required, it is the responsibility of the Host to arrange for such services.

Session Initiation and Payment

The session will be initiated once all required documentation and payment are received by SG staff:

- Signed *Host Responsibilities Checklist and Acknowledgement*
- Signed Contract for Services and any required deposit/fees.
- Completed *Work Experience Form(s)* for each Candidate
- Copy of photo ID for each Candidate
- Insurance documentation – See 3.1.1 & 3.1.2 of this procedures document

Written Exam

- If the written exam will be administered (e.g. first-time examinations and written exam retests) a suitable classroom area must be secured.
- If any Candidate has requested and been granted oral testing on the written exam, including assistance from an interpreter, they should be tested apart from the main group to eliminate any disruption this could cause to the main group.

Performance Exam

- Coordinate and secure a safe working area
- Secure and make available all equipment and ensure it is properly working: gun/pump, compressor, hose, nozzle, blow pipe, etc.
- Determine mix and have sufficient shotcrete material available.
- Fabricate Performance Test Panels and scaffolding according to ACI program policies. Fiberglass rebar may be used in place of steel (this is easier on the core bits).
- Erect scaffolding for the overhead test panels and secure the test panels
- Provide forklift or any other type of adequate lifting equipment for the overhead panels
- Provide weather protection for the test panels
- Ensure water set up with recommend minimum pressure for the dry process
- Provide hot water for either process in cold weather
- Provide burlap or plastic for curing of the test panels
- Provide personal protection equipment for each applicant
- Arrange for site clean-up and equipment clean-up

This *Host Responsibilities Checklist and Acknowledgement* must be submitted to ACI as an original, completed and signed two-sided form

Coring

- Arrange for/coordinate the coring as required in the *ACI Program Policies for Certification of Shotcrete Nozzlemen*.
- Provide coring equipment with 4 in. core bits (each panel takes 20-30 min to core)
- Provide manpower to move and core the test panels

Cancellation Policy

Make sure you understand the cancellation Policy at the time you sign the contract and return it to the SSG.

By signing this form, I understand that I am initiating an ACI Certification Examination session. I understand the requirements as stated on this form and preceding procedures, and I agree to accept responsibility for all items. I accept responsibility and costs for any delay related to unfulfilled or insufficiently completed requirement.

I recognize and accept the Examiner's authority and judgment on all items and issues related to the examination session.

I accept responsibility for all costs and delays resulting from "acts of God" that are outside the control of the Host, Organizer, Sponsoring Group, Examiner, or ACI's control. This includes those that result in delay or cancellation of the Examiner attendance.

Host\Organization Name:

Session Date & Location:

Host Organizer>Contact Name:

Signature

Date

Appendix C

ACI Examiner Personal Conduct Guidelines

As an ACI approved Examiner, it is critical that you conduct yourself in a manner that is solely representative of ACI and not another company, organization or employer.

This includes the following:

- Refrain from promoting the services or products provided by any company or organization other than ACI while representing ACI during examination sessions. Examples of this type of promotion may include:
 - o citing specific examples of your companies' work
 - o distributing company- or organization-specific materials
 - o offering special pricing for your company's, or your organization's products or services
 - o promoting your company's, or your organization's products or services to personnel who participate in or sponsor a session

- It is not acceptable to wear clothing bearing your employer or organization's name/logo while serving as an ACI Examiner. *An exception to this rule is permitted for protective clothing and safety items used during shotcreting operations.*

- It is acceptable to mention your employer if asked.

In summary, when you act as an Examiner for ACI, you are an agent of ACI and must remain neutral in regards to promoting specific products, brands, and services.

Appendix D

Procedures for Planning, Preparation, and Execution of an ACI Shotcrete Nozzleman Certification Exam Session

1. **Sponsoring Group (SG)** receives initial Request for Session.
2. **SG** collects session information:
 - a. Host
 - b. Organizer (Host Representative)
 - c. Date
 - d. Location
 - e. Wet- or Dry-mix process
 - f. Overhead
 - g. Number of candidates
 - h. Language(s) of Candidates and any need for translators
 - i. Roster including ID Numbers of Candidates Recertifying
 - j. Requests for oral examination on the written exam
 - k. Requests for special accommodation under the Americans with Disabilities Act (ADA)
 - l. Education needs (the level of Education offered by the Sponsoring Group, if any, is at the discretion of the Group)
3. **SG** sends the *ACI Examiner/Host Relationship Disclosure Form* to the Examiner for completion and return.
4. **Examiner** completes and returns *ACI Examiner/Host Relationship Disclosure Form*
5. **SG** receives and reviews the *ACI Examiner/Host Relationship Disclosure Form* and determines if a conflict-of-interest relationship (COI) exists.
 - a. If a COI exists, SG may seek another Examiner and repeat the process or forward the Request for Session to ACI.
 - b. If no COI exists, the SG sends to the Host the following:
 - i. *Host Responsibilities Checklist and Acknowledgement*
 - ii. *Work Experience Form(s)* [Initial Exam (500 hour) forms for those certifying for the first time, and Recertification (1000 hr) forms for individuals seeking recertification through performance examination ONLY.
 - iii. *ACI Certification Policies for Shotcrete Nozzlemen*
 - iv. Contract for Services (it is strongly suggested that the SG collect payment for all services prior to the exam session)
6. **Organizer** receives *Host Responsibilities Checklist and Acknowledgement* and *Work Experience Form(s)* and distributes *Work Experience Form(s)* to Candidates, advising each they must participate in the Examiner interview if contacted.
7. **Candidates** complete the *Work Experience Form(s)* and return them to the Organizer.
8. **Organizer** receives the *Work Experience Form(s)* has them reviewed for accuracy, verified, and signed by the Candidates' Employer(s), and returns them to the Sponsoring Group.
9. **SG** receives the *Work Experience Form(s)*, reviews them for completeness, and forwards them to the Examiner.
10. **Examiner** receive copies of each Candidate's *Work Experience Form(s)* from Sponsoring Group, and performs the following verification procedure:
 - a. Review the information submitted on the Candidate's *Work Experience Form* for completeness and feasibility.
 - b. Interview the participant prior to approving and signing the Candidate's *Work Experience Form(s)*. The complete content and length of the Examiner's interview with the Candidate is left to the Examiner's judgment and discretion in deciding if, in their opinion, the Candidate indeed possesses the required minimum amount of work experience. Every Candidate interview must however include the following:
 - The identity of the Candidate
 - Discussion of any items on the Candidate's *Work Experience Form* that seem incomplete, unclear, or not feasible
 - Discussion on the Candidate's nozzleman experience, including how long they have been a nozzleman, the type of projects in which they have been involved, and the type of equipment they have used.

Once the Examiner is satisfied with the accuracy of the information on each Candidate's *Work Experience Form(s)* and that a minimum of 500 hours as a nozzleman has been verified, the Examiner signs and dates the Candidate's *Work Experience Form(s)* and returns the forms to the Sponsoring Group.

11. **SG** confirms the exam date with the Organizer and orders exam materials from ACI based on the information collected in #2, and the number of eligible Candidates Participants). SG creates a session roster of Participants for the Examiner.
12. **SG** receives the exam materials, verifies the contents are correct (per the exam order) and provides the materials and the session roster to the Examiner.
13. **Examiner** receives the exam materials and contacts the Organizer to discuss the venue, materials, and equipment requirements stated in the Written Exam, Performance Exam, and Coring sections of the *Host Responsibilities Checklist and Acknowledgement*
14. **Organizer** prepares for the exam session by following the requirements stated in the Written Exam, Performance Exam, and Coring sections of the *Host Responsibilities Checklist and Acknowledgement*, and arranging the attendance of Participants.
15. **Examiner** verifies all required facilities, equipment and materials are available and conform to ACI Shotcrete Certification Program Policies prior to beginning the exam session. If any items are missing, incomplete, or not functioning properly, the Examiner must suspend beginning the session and notify the Organizer/Host immediately. Once the Examiner is satisfied everything is in order, he conducts the exam session including the following:
 - a. Except for ACI or the Sponsoring Group, refrain from promoting current employer or any organization with which the Examiner is affiliated, or those entities products or services during the ACI examination process. Examiner.
 - b. Check photo Identification of each Participant and confirm that each has been properly admitted to the examination session (i.e., are identified as having been interviewed and their work experience verified).
 - c. Administer the written exam employing any resources for oral examination or translation as arranged by prior negotiation with the Sponsoring Group.
 - d. Administer the performance exam, employing any Examiner applicants as arranged by ACI or the Sponsoring Group. Record the performance of the Examiner candidate on the appropriate form and return to ACI for processing and inclusion in their Examiner record.
 - e. Direct the stripping and coring of the test panels, organize and grade the cores, and complete and sign the performance exam checklists and summary reports.
 - f. Take photos of each Participant (face shot), the back of each test panel after stripping, and the Participant's cores. Document and submit the mix design to ACI (include in the exam materials).
 - g. Refrain from soliciting or accepting any form of compensation for time and expenses related to the certification session from the Organizer/Host.
 - h. Ship all session materials to the Sponsoring Group for final review and organization via a traceable method of shipping. This includes either hard copy or electronic copies of all photos.
16. **SG** receives the exam materials from the Examiner, organizes the materials, verifies the completeness of the package (including all *Work Experience Forms*, both verified and denied), and returns to ACI via traceable method of shipping.
17. **SG** remits payment to the Examiner, ACI and any other vendors for services rendered in the planning and execution of the exam session and processing and issuance of credentials.