ASA Sponsored ACI Shotcreter Certification Policy

April 2024



1. Introduction

This document describes the responsibilities of and relationship between ASA, ACI, the "Host," and the candidates. This policy supersedes all previous action of the ASA Board of Direction with respect to ASA administration of certification and education sessions and is effective April 2024.

Every ASA Sponsored certification session is organized through the participation of a "Host". The Host may make the certification session available publicly or privately for a restricted audience. If the Host chooses to allow public participation, Host must comply with the requirements set forth in the ASA Policy on Open Sessions as indicated in Appendix A. The Host shall have no relationship with the session Examiner that is prohibited in this policy (see section 3.6.1).

ASA will conduct certification exams only if the candidates have completed an "ASA-Education program". An Education program for new shotcreter candidates usually immediately precedes the certification session.

2. Definitions

- **2.1 ACI Shotcreter and Shotcreter-in-Training Certification Program Policies (ACI Certification Policies CPP 660-1):** The ACI Shotcreter program policies are maintained by ACI Certification Committee C660: Shotcreter Certification. The ACI Certification program policies are the governing rules in conduct and operation of the ACI Shotcreter Certification program. A copy of the policies can be found at www.concrete.org/certification/certificationprograms.aspx.
- **2.2 ASA Education Program**: The ASA Education Program was developed to correspond with materials presented in the ACI CP-60: *Craftsman Workbook Shotcreter*. This course presents an overview on materials, equipment, placement technique, finishing, curing, testing, and safety as it relates to the shotcreter and the shotcrete process. This course helps individuals prepare for the ACI Shotcreter Certification exam and attendance is required for those pursuing new certification through an ASA sponsored Certification Session.
- **2.3 ASA Executive Committee (EC)**: The body responsible for oversight of all ASA Certification and Education activities.
- **2.4 ASA Executive Director**: A member of the Executive Committee, is directly responsible for oversight and management of ASA's certification processes.
- **2.5 ASA International Sponsoring Group**: The entity identified by ACI as their agent in administering the ACI Shotcreter Certification program according to established ACI Policy.
- **2.6 Call for Examiners**: The formal process by which ASA selects a qualified Examiner for a Certification Session.

- **2.7 Candidates:** Individuals pursuing certification; Candidates become Participants when their Work Experience is verified by the Examiner.
- **2.8 Certification Session (Session)**: A multi-day event held at a location coordinated with the Host that is arranged and staffed by ASA to conduct ACI Shotcreter certification and, where required, an ASA Shotcreter Education program.
- **2.9 Conflict of Interest**: The disclosure of any relationship between the Examiner, Host, and Participants of a certification session
- **2.10 Examiner**: Individual approved by ACI as a Shotcreter Certification Examiner, appointed to ASA's roster of ACI-approved Examiners by ASA, and assigned by ASA to act as and fulfill all Examiner duties for a Certification Session, including the Education Program. He is also known as the Examiner of Record (EOR).
- **2.11 Examiner/Host Relationship Disclosure Form**: A form that discloses any relationship between the Examiner and the Host and completed by the Examiner.
- **2.12 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.
- **2.13 Open Session**: A Certification Session where more than 50% of the Candidates are not employed by the Host company or its subsidiaries, and subject to additional requirements as stipulated in Appendix A.
- **2.14 Organizer**: The single person identified by the Host as the coordinating contact for ASA, and the Examiner.
- **2.15 Participant**: An individual pursuing Shotcreter or Shotcreter-in-Training (SIT) certification or recertification who have been cleared to participate in the Performance Exam by the Examiner verification of their work experience.
- **2.16 Work Experience:** A written record of the candidate's time spent manipulating the nozzle for shotcrete placement.

3. Responsibilities

3.1 Host Responsibilities: The Host must designate an Organizer who will serve as the Host's agent/representative throughout the Session. 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 Session. All fees and expenses will be invoiced by and paid to ASA at the established standard fees posted on the ASA website: www.shotcrete.org.

The Host must provide completed work experience forms for each candidate, space for conducting the ASA Education Program (when the Education is required for a session), and a safe working area for the shotcreting, materials, and equipment for the performance exam(s). The Host is also responsible for extracting cores (under Examiner supervision) from each Participant's test panels for grading.

- **3.1.1** The Host must provide a current certificate of insurance to ASA staff prior to the Certification Session. The Host's insurance must include general liability insurance with a minimum of 1 million dollars (\$1,000,000) coverage per occurrence.
- **3.1.2** The Host must provide to ASA staff prior to the session, a certificate of Workman Compensation insurance for all participants in the Session.
- **3.1.3** The Host must sign and submit the Host Requirements Checklist (Appendix B), agreeing to the terms stated therein.
- **3.2 Organizer Responsibilities**: The Organizer must coordinate the timely submission of all necessary paperwork and communication between the Participants, ASA, and the assigned Examiner. The Organizer is responsible for scheduling the Session with the Participants and the execution of all Host responsibilities (Appendix B).
- **3.3 Candidate Responsibilities**: The Candidate is responsible for completing and signing their required shotcreter experience (minimum of 500 hours for a new certification; 25 hours for SIT; or 1000 hours for recertifications in lieu of retaking their written exam) on an ASA Work Experience Form. The completed form(s) should be submitted to the Organizer for final review and signature. Falsification of work experience documentation will constitute removal of the Participant from the certification portion of the Session and possible future certification sessions.
- **3.4 Participant Responsibilities:** Participate in the ACI certification exams.
- **3.5 ASA Responsibilities**: As an International Sponsoring Group, ASA is responsible for payment of all certification exam fees charged by ACI, and for invoicing the Host for all ASA incurred charges associated with the Sessions. ASA will coordinate all session details between the Organizer, the Examiner, and ACI. ASA is solely responsible for choosing the Examiner for an ASA Sponsored Session. Hosts who have documented concerns with an assigned Examiner may request another Examiner. ASA will handle all financial transactions related to the Session.

The ASA Executive Director provides oversight of ASA's roster of ACI-approved Examiners, ensuring they conform to all ASA and ACI policies related to the Shotcreter Certification program, in order to maintain and improve ASA's execution of the education and certification of nozzlemen. The Executive Director also works with ACI C660 to refine and improve the shotcreter certification process.

Executive Committee approval of a Host's request for a specific Examiner for a certification session is a rare occurrence and only granted for very unique circumstances. Petitions for a specific Examiner to conduct a Certification Session must be submitted in writing for consideration at a regularly scheduled ASA Executive Committee meeting.

Host can request a current Examiner from ASA's roster to conduct the Education portion of a Session for an additional \$500 set up fee. The Examiner for the Certification Session is still selected by ASA.

3.6 Examiner Responsibilities

- **3.6.1 Examiner/Host Relationship Disclosure Form**: The Examiner is required to complete and sign the Examiner/Host Relationship Disclosure Form upon responding they are interested in the Session in the ASA Call for Examiners. The Examiner is responsible for notifying ASA if at any point they realize that their relationship with the Host and/or Participants creates a Conflict of Interest including any of the following requirements:
 - o The Examiner must not be currently employed by the Host organization or any of its parent or subsidiary organizations.
 - o The Examiner must not be currently employed by the same organization as any of the participants.
 - o The Examiner must not be currently in a business relationship with the Host or any of its parent or subsidiary organizations. In the case of an Open Session, Examiner must also notify ASA if they become aware that they are in a current business relationship with a Participant's company
 - o The Examiner must not be personally related to the Host and/or Participants.

ASA reserves the ultimate determination in assessing if a conflict of interest exists.

- **3.6.2 Examiner Availability**: Examiners responding to a Call for Examiner for a Session must be sure their schedule allows them to be available to extend the Session duration by at least one day to accommodate circumstances that require an extension of the Session duration.
- **3.6.3 ACI Shotcreter Certification Program Policies**: The Examiner's responsibilities are described in the ACI Certification Policies. These policies govern the program, specifying requirements and setting standards for evaluation. They guide the Examiner's conduct at the Session which include, but are not limited to, marking the performance exam, grading the cores and proctoring the written exam.
- 3.6.4 Verification of Candidate's Work Experience: The Examiner will receive copies of each Candidate's Work Experience form prior to the Session. An Examiner's evaluation of a Candidate's Work Experience requires the Examiner to review the information submitted on the Candidate's Work Experience Form for completeness and feasibility. The Work Experience Form includes the following information for each project the shotcreter is submitting experience for: Project Name; Project Location; Employer Contact Name & Phone for Verification; Begin Date; End Date; Wet or Dry Mix; Vertical or Overhead Hours on Nozzle; Hand or Remotely manipulated hours on Nozzle and Scope of Work (including approximate total cubic yards or square feet placed by shotcreter Form with the corresponding hours). After review, the Examiner must speak directly with the Candidate prior to approving and signing the Participant'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:

- Confirming the identity of the Candidate.
- Discussion of any items on the Candidate's Work Experience Form that seems incomplete or questionable.
- Discussion on the Candidate's nozzling experience including how long they
 have been a shotcreter, the type of work they have been involved in, and the
 type of equipment they have used.

Once the Examiner is reasonably sure of the accuracy of the information on each Candidate's Work Experience Form and that the supplied experience meets the minimum requirements for the process(es) and orientation(s) they are pursuing, the Examiner may allow the Candidate to become a Participant and shoot their performance panel(s).

If at any point during the Session, the Examiner judges that a Participant does not have the required minimum experience, he should notify the Host and further question the Participant's qualification. If doubt remains, the Examiner should stop the shotcreter from continuing in the Session, noting this accordingly on their Work Experience Form and/or Performance Exam. However, if a Participant is deemed to not have the minimum 500 hours required for full certification (especially the hours required for overhead orientation, for which there is no substitution) but does possess at least 25 hours of experience, the Examiner may process the Participant as a Shotcreter-in-Training with the approval of the Participant and the Organizer.

Fully endorsed Work Experience Forms confirm that the hours of verified experience in each process and orientation pursued by each Participant meets the requirements of that certification. This requires signatures from the Participant, company representative and Examiner, and must accompany the returned exam materials from a session for each participant as applicable.

3.6.5 Examiner Arrival to Certification Session: When the Examiner arrives on site to begin the Session, they should confirm that all required facilities, equipment & materials (including workbooks when Education will be conducted) are present and conform to policy. If any of these items are missing or incomplete, the Examiner should notify the Organizer immediately.

The Examiner must also check photo identification for each Participant and confirm that each is on the Session Participant list received from ASA staff. A clear image of the photo ID and headshot of each Participant with their names clearly indicated should be submitted to ASA.

- **3.6.6 ACI Requirements on Performance Exams**: Include images of the back side of each test panel, and two opposite sides of all five cores from the test panel for each Participant. Any cores graded 4 or 5 should be documented by close-up images of those cores with the significant defects shown. The concrete mixture design should also be documented.
- **3.6.7 Performance Exams for Sessions with More than 14 Test Panels**: For Sessions with more than 14 test panels, ASA's default quote to the Host will include an

additional session day(s). If time constraints are a factor, the Host must contact ASA staff no less than 3 weeks before the Session start to discuss options and costs.

- **3.6.8 Return of Session Materials to ASA**: The Examiner must mail all session materials to ASA for final review via a traceable method of shipping. ASA will verify the completeness of the materials and then forward the examination documents to ACI for processing.
- **3.6.9 Examiner Compensation**: The Examiner must ensure that he will accept compensation for time and expenses related to the certification session only from ASA. The Examiner will under no circumstances directly invoice the Host nor accept payment or other compensation from the Host.

4. Review of ASA Sponsored Certification Sessions:

ASA reserves the right to conduct a review of any ASA Sponsored certification session to ensure conformance to both the ACI and ASA certification policies, and to ensure an acceptable level of quality.

If the ASA EC decides to initiate a review, the EC will appoint an ad-hoc task group for each review consisting of at least 3 current ASA Board members and a staff member to oversee the review. The EC will ensure that the members of the task group have no conflict of interest with the Host, Participants or Examiner under review.

4.1 Reasons for a Session Review:

- **4.1.1 Complaints & Concerns from ASA Members or Industry Personnel about a Specific ASA Certification Session**: Complaints and concerns regarding the conduct or quality of a Session should be submitted directly to ASA staff. ASA staff will conduct an initial review to confirm that issues are based on specific items in the ACI Program policies or the ASA Certification Program policies. Should staff determine that the complaint or concern is justified by specific policies or ethical issues; the issue will be brought to the ASA EC. The EC will decide if a review should be initiated.
- **4.1.2 Observations by ACI and/or ASA Staff**: Should staff observe potential policy or ethical violations, staff may present the situation to the EC for review.
- **4.1.3 ASA EC Decision**: The EC reserves the right to review any ASA-sponsored Session for any reason it deems appropriate including random quality reviews.
- **4.2 Components of a Session Review**: An ASA Session review can consist of one or more of the following review components:
 - **4.2.1 Work Experience**: Review the Session's verification of Participant's work experience. This can include a review of how the verification was completed.
 - **4.2.2 Returned Performance Materials**: Review of Session materials returned to ASA and conformance with the required format of ACI performance exam materials.

- **4.2.3 Interview with Examiner**: Interviews will be conducted by the full task group, not by one individual. The interview can include the following:
 - **4.2.3.1** Review of the overall session schedule & process.
 - **4.2.3.2** Verify the Examiner exhibited proper knowledge of the required ASA and ACI certification process requirements.

4.2.4 Interview with the Organizer and/or Participants

- **4.2.4.1** Review the perceived actions of the Examiner during the Session
- **4.2.4.2** Note any concerns the Organizer or Participants may have had about the professionalism, impartiality or ethics of the Examiner.

Appendix A

ASA Policy on Open Sessions

Definition: An "open session" is any Session where an ASA member approaches ASA seeking to conduct a Session where more than 50% of the Participants to be certified come from outside companies.

Purpose: To provide an economical venue for individuals or smaller companies with few nozzlemen to complete certification. Hosting an Open Session is NOT intended to become a money-making opportunity for a Host or to be used as a marketing tool for the Host.

Open Sessions benefit the industry but should include additional specific requirements for the Host.

Policy:

- 1. Examiner must attend the Education. The Host, for an additional cost, may request a separate Examiner to conduct the education. The Examiner of Record is assigned by ASA and is generally someone other than the requested Examiner conducting the education.
- 2. Limit a single Host or subsidiary to holding two Open Sessions per year, with the potential to petition the ASA Board for additional Sessions.
- 3. The Host for an Open Session must have extensive shotcrete experience and must submit experience to ASA staff for evaluation before session approval.
- 4. Host shall have all necessary equipment, facilities, insurance, and staff to properly and safely execute the Open Session.
- 5. Host of an Open Session must have a conversation with the ASA Executive Director before initiation of the session to qualify host experience, proper equipment, facilities and quality of materials with sufficient backup to assure the session can be completed as scheduled.
- 6. Hosts need to provide the participants with complete details of the equipment, layout and materials to be used in the session in advance of the session with adequate time for the participant to evaluate before committing to their attendance.
- 7. ASA retains the right to audit all open sessions.

Appendix B

Host Requirements Checklist

General

- Communicate Session needs including suggested date, location and participants to ASA Staff.
- o Review & approve "Certification Session Quote" sent from ASA staff.
- Review & pay "Final Certification Session Invoice" sent from ASA staff.
- o If an Education session is planned, distribute the study materials (ACI CP-60) to the Participants prior to the session. (Recommend distribution at least 7 days prior to the certification session).
- Communicate to ASA staff if host is willing to open the session to the public (final approval to participate of all applicants is the right of the Host). Depending on the number of Participants from outside the Host company the Open Session Policy (Appendix A) may apply.
- o Ensure completion and return to ASA staff of Host Evaluation.

Work Experience

- o Complete each Participant's Work Experience Forms, verify accuracy with the Participant, sign each Participant's form, and return all completed Work Experience documentation directly to ASA Staff at least 2 weeks before the scheduled start of the Session. The Host may not sign work experience forms for Participants from other firms.
- o For Participants who are not employed by the Host company, the Host is responsible for collecting and transmitting completed work experience forms for those Participants to ASA Staff.
- o The Examiner will speak with each Participant 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 released once all required documentation and payment are received by ASA staff.

- Signed Session Quote form
- Signed Host Requirements Checklist (Appendix B, signature block next page)
- o Full payment of the invoiced amount including the \$3,000 deposit (for companies that are not current corporate members), plus the "rush" session fee, if applicable. Please note: payment, including deposit, will be processed upon receipt. A refund of the session deposit (\$3,000.00 minus any unforeseen costs/charges) and/or any additional charges or credits will be issued once the completed Session materials are received by ASA Staff, reviewed for completeness and passed on to ACI Certification for processing.
- Completed Work Experience Forms for each Participant.
- o Ensure each Participant brings a photo ID, preferably government issued, to the Session to verify identification, a copy of which needs to be submitted with exam materials.
- o Insurance documentation See 3.1.1 & 3.1.2 of this Policy

Education Session and Written Exam

- o If the Session includes an ASA Education Program or written exams (e.g. first-time examinations and written exam retests), the Host must provide a suitable classroom area.
- o Host must communicate any oral or language needs when completing the Session Quote Request form.
- o 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

- Provide a safe working area
- o Make available all equipment needed for the shotcrete placement: gun/pump, air compressor, delivery and air hoses, nozzle, blow pipe, etc. (minimum air compressor size required for wet-mix process is 200 CFM (7.0 m³/min) without a blow pipe, 375 CFM (11 m³/min) or greater with a blow pipe. Dry-mix guns have a recommended air flow requirement of 600 CFM [17.0 m³/min]).
- Document the concrete mixture to be used and have sufficient shotcrete material available for placement. Minimum concrete material temperature of 50 °F (10 °C) in cold weather, Maximum temperature of 95 °F (35 °C) in hot weather.
- Fabrication of Performance Test Panels, reinforcement and scaffolding according to ACI Policy. GFRP reinforcing bars of
 the same size as the steel reinforcing bars shown in the ACI Policy panel requirements can be used in place of steel.
 Using fiberglass reinforcing will significantly decrease the time needed to core the performance panels.
- Properly positioning and securing the test panels for vertical and overhead performance exams.

- o Provide forklift or other type of lifting equipment for moving the overhead panels for coring.
- o Provide weather protection for the test panels heat with supplemental heat and insulating blankets if temperatures are 45 °F (7 °C) or lower and hot weather protection for 90 °F (35 °C) or higher.
- o For the dry-mix process, ensure adequate water flow and pressure are available. Minimum recommended water pressure is 100 psi (0.7 MPa).
- o Provide hot water for either process in cold weather (50°F [10 °C] or below)
- o Provide personal protection equipment for each applicant.
- o Arrange for site clean-up, concrete material disposal, and equipment clean-up.
- o Provide all equipment information and concrete mixture design to Participants prior to session.

Coring

- Arrange for/coordinate the coring as required in the ACI Certification Policies.
- o Provide coring equipment with 4 in. (100 mm) core bits. The Examiner will coordinate with the Organizer the number of core drills needed to complete the coring in the allocated time. Use of an experienced coring contractor has proven advantageous to get the cores taken efficiently and safely.
- Provide manpower to move and core the test panels.
- o Provide a flat table or other suitable area with adequate lighting for the Examiner to grade and document the cores as they are taken from each panel.

Cancellation Policy

ASA policy allows the Host to reschedule or cancel a session up to two (2) full weeks prior to the scheduled session start date. Changes made less than 2 weeks before the start of a session will incur the following fees:

Rescheduling fee - \$950 USD | Cancellation fee - \$1500 USD

By signing this form, the Host is confirming a Certification session with ASA. The Host understands their requirements as stated on this form and in this ASA Sponsored ACI Shotcreter Certification Policy and agrees to take responsibility for all items. Should a requirement not be fulfilled or adequate, the Host accepts responsibility and costs for any related delay.

By signing this form, the Host recognizes and accepts the Examiner of Record's authority and judgment on all items and issues related to the session.

By signing this form, the Host accepts responsibility for all costs and delays resulting from all "acts of God" that are out of both the Host's and ASA's control. This includes those that result in delay or cancellation of the Examiner of Record's attendance. ASA will work with the Host to minimize related delays and cost, but ultimate responsibility lies with the Host.

Host/Organization Name
Session Date & Location
Jession Date & Location
Host Organizer/Contact Name
Signature/Date