

Certification Policies for Aggregate Base Testing Technician—AASHTO Methods and Aggregate Base Testing Technician—ASTM Methods

Last approved by the Certification Programs Committee February 14, 2025

The statements contained herein are approved policies and procedures. This revised policy statement supersedes all previous action with respect Aggregate Base Testing Technician certification.

The details of these certification program policies are presented as follows:

- 1.0 Definitions
- 2.0 Certification Criteria
- 3.0 Examination Criteria
- 4.0 Appeals Criteria
- 5.0 Administrator Criteria
- 6.0 Sponsoring Group Criteria
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1.0 DEFINITIONS

- a. Examinee An individual who is taking an examination.
- b. Examiner An individual who is authorized by ACI to serve in responsible charge of an examination session.
- c. Proctor An individual who assists the Examiner in administering a written examination.
- d. Sponsoring Group (SG) An organization approved by ACI Certification to administer examinations.
- e. Supplemental Examiner An individual who assists the Examiner in administering a performance examination. An Examiner also assumes the role of Supplemental Examiner (and all the requirements thereof) when administering a performance examination to an Examinee.

2.0 CERTIFICATION CRITERIA

a. The American Concrete Institute (ACI) certification programs for Aggregate Base Testing Technician—AASHTO Methods and Aggregate Base Testing Technician—ASTM Methods each require passing both a written examination and a performance examination based on the applicable practices and test methods. Certification in either/both program(s) will be issued upon successful completion of the requirements.

b. For Aggregate Base Testing Technician—AASHTO Methods:

- i. Both the written and performance examinations for Aggregate Base Testing Technician—AASHTO Methods must be passed within a one-year period.
- ii. A candidate who is certified as Aggregate Base Testing Technician—ASTM Methods may become certified as Aggregate Base Testing Technician—AASHTO Methods by passing the written examination (only) for Aggregate Base Testing Technician— AASHTO Methods within one year of having achieved the Aggregate Base Testing Technician—ASTM Methods certification.

c. For **Aggregate Base Testing Technician—ASTM Methods:**

- Both the written and performance examinations for Aggregate Base Testing Technician—ASTM Methods must be passed within a one-year period.
- ii. A candidate who is certified as Aggregate Base Testing Technician—AASHTO Methods may become certified as Aggregate Base Testing Technician—ASTM Methods by passing the written examination (only) for Aggregate Base Testing Technician—ASTM Methods within one year of having achieved the Aggregate Base Testing Technician—AASHTO Methods certification.
- d. Certification for either of the Aggregate Base Testing Technician certifications shall be valid for a period of five years from the date of completion of all certification requirements.

3.0 EXAMINATION CRITERIA

- a. The content of the examinations for certification as **Aggregate Base Testing Technician— AASHTO Methods** and **Aggregate Base Testing Technician—ASTM Methods** shall be derived directly from their respective Job Task Analysis (Annexes 620.5-1 and 620.5-2).
- b. The examinations shall be conducted by an Examiner, Proctor(s), and/or Supplemental Examiner(s), as applicable. [See Administrator Criteria.]
- c. Retaking any written or performance examination after previously failing to meet the passing criteria shall require reexamination of the entire examination (not just the section[s] failed).

d. Written Examinations

- The written examinations shall consist of approximately 75 multiple-choice questions, grouped into sections according to the practices and test methods enumerated on the Job Task Analysis.
- ii. A maximum of two hours shall be permitted for completion of each written examination, after which the answer sheets must be collected. Examinee is allowed additional time—up to 30 minutes—with access to the question booklet to note examquestion challenges.
- iii. The written examinations are open-book; only reference materials approved by ACI shall be permitted in the examination area. Simple-function (i.e., non-programmable, no mobile devices) calculators are permitted but Examinees are not allowed to share calculators during their examination.
- iv. Passing each written examination requires both of the following:
 - 1. Score 60% correct or greater on each section of the examination; AND
 - 2. Score 70% correct or greater on the overall examination.

e. Performance Examinations

- i. The performance examinations shall require the Examinee to correctly perform—pursuant to the contents of each ACI performance examination checklist—all required procedures enumerated on the Job Task Analysis.
 - <u>Note:</u> Some procedures may be described verbally as indicated on the performance exam checklists. Specific instructions keyed to these areas, describing the administrative procedures, will be included with the exam materials.
- ii. Examinees who are currently certified as ACI Aggregate Testing Technician—Level 1 at the time of taking the performance examination for Aggregate Base Testing Technician—AASHTO Methods or Aggregate Base Testing Technician—ASTM Methods may be exempt from performing certain procedures, pursuant to the contents of each ACI performance examination checklist.

- iii. The performance examinations are closed book; notes or other technical material shall not be permitted in the examination area. Simple-function (i.e., non-programmable, no mobile devices) calculators are permitted but Examinees are not allowed to share calculators during their examination.
- iv. Performance examinations shall be conducted in the direct presence of a Supplemental Examiner(s).
- v. Grading for individual performance examination trials shall be on a overall pass/fail basis, with the Supplemental Examiner indicating "pass" or "fail" for each step of the checklist. Incorrect performance or omission of one or more of the steps of the performance checklist shall constitute failure of that trial.
- vi. The Supplemental Examiner shall not stop a trial at any point which an error is made.
- vii. Following completion of each trial, the Supplemental Examiner shall inform the Examinee of the results.
- viii. An Examinee shall be allowed a second trial if the first trial was not passed for each of the applicable procedures. Examinee is allowed leave the examination area to consult study materials before a second trial.
- ix. An Examinee shall be permitted to suspend one trial and begin the procedure over immediately. A voluntary suspension of a trial shall not be counted as a failure of that trial.
- x. A second trial or re-trial following voluntary suspension of a trial shall require performance of the entire procedure from the beginning—not from the point of error or suspension.
- xi. When a failure of a trial occurs, the Supplemental Examiner shall inform the Examinee of the particular step(s) performed incorrectly.
- xii. Failure on any of the required procedures after two trials will constitute failure of that section of the performance examination, and thus a failure on the entire performance examination.
- xiii. All sections of each performance examination required for certification must be taken within a single examination session not exceeding eight calendar days.
 - <u>Note:</u> This provision was adopted to address the number of tests on the performance exam, their complexity, and the amount of time in setup and administration necessary to conduct one initial full exam (all sections) once through in its entirety. It is not intended that Examinees be allowed more than two attempts to pass any one practice or test method within any single eight-day exam session.
- xiv. Appeals on a performance examination (e.g., regarding the judgements of a Supplemental Examiner) shall be directed to the Examiner during the exam session.

4.0 APPEALS CRITERIA

- a. Appeals regarding the overall testing environment or experience shall be directed to the Examiner. In the event that the Examinee is not satisfied with the decision of the Examiner regarding the appeal, the Examinee may pursue an appeal with ACI according to the following order:
 - i. Sponsoring Group
 - ii. ACI Certification staff management
 - iii. Certification Appeals Committee [consisting of ACI Certification staff management, Chairman of Certification Programs Committee, and Chairman of Committee C620]
 - iv. Committee C620, Laboratory Testing Technician Certification
 - v. Certification Programs Committee
 - vi. Appeals submitted directly to ACI for consideration after the exam session must be communicated within 60 days of the examination.

5.0 ADMINISTRATOR CRITERIA

- a. Examination sessions must be supervised by an Examiner and constantly monitored by the Examiner, Supplemental Examiner(s), and/or Proctor(s).
- b. Examiners, Proctors, Supplemental Examiners, and/or SGs have no jurisdiction over the content of any examination, nor over the grading of the written examination.
- c. Examiners, Supplemental Examiners, Examiners acting as Supplemental Examiners, and Proctors shall not conduct any portion of the examination for any Examinee with whom they are personally related.

d. EXAMINERS

- i. Examiners shall be chosen by the SG and approved by ACI to administer the program(s).
- ii. In order to be considered for Examiner status, the applicant shall have assisted in the administration of at least two ACI examination sessions (any program including written and performance components where applicable), performing to the satisfaction of the Examiner of record, and:
 - 1. Satisfy all of the following criteria:
 - a. Be a registered professional engineer, or hold equivalent international credentials; and
 - b. Have been certified as any version of ACI Aggregate Base Testing Technician; and
 - c. Have had at least two years of verifiable experience in concrete construction, inspection or testing.

OR

- 2. Satisfy all of the following alternate criteria:
 - a. Be certified as any version of ACI Aggregate Base Testing Technician at the time of application; and
 - b. Have had at least five years of verifiable experience in ACI certification administration, concrete construction, inspection or testing; and
 - c. Have participated in at least four ACI examination sessions as a Proctor and/or Supplemental Examiner for any ACI certification program. This is in addition to the administration assistance, as stated above, but is permitted to be completed concurrently.
- iii. The Examiner shall be directly responsible for:
 - 1. Selection of the Supplemental Examiners and Proctors;
 - 2. Verification that the qualifications of the Supplemental Examiners and Proctors conform to the Administrator Criteria outlined in this policy;
 - 3. Ensuring the secure handling of examination materials;
 - 4. Verification of the identity of each Examinee;
 - 5. Ensuring that the Examinees are aware of the certification criteria;
 - 6. Verification that the Examinees have signed the release statement on the written and performance examinations prior to testing;
 - Verification that the performance examinations are conducted by approved Supplemental Examiners, and co-signing the performance checklists where appropriate;
 - 8. Entering the appropriate grade for the completed performance examination on the checklist report;
 - 9. Ensuring that all Examinees have an opportunity to take a second trial on any failed procedure of the performance examination; and
 - Ensuring that examination questions are not interpreted during the course of the written examination.

e. PROCTORS

- i. Proctors shall be permitted to assist the Examiner in conducting the written examination.
- ii. Proctors must be considered conscientious and trustworthy by the Examiner.

f. SUPPLEMENTAL EXAMINERS

i. Supplemental Examiners shall be permitted to assist in conducting the performance examination (and may be authorized to conduct the performance examination without direct supervision of an Examiner with prior approval of ACI staff management).

<u>Note:</u> In cases where the Supplemental Examiners have been approved to conduct the performance examination without the direct supervision of an approved Examiner, the Supplemental Examiner shall be responsible for determining that the Performance Examination requirements are met.

- ii. Supplemental Examiners shall satisfy the following requirements:
 - 1. Have had recent experience in concrete testing;
 - 2. Be selected and adjudged qualified by the Examiner or ACI Committee C620;
 - 3. Be considered trustworthy and conscientious.
- iii. Supplemental Examiners shall not observe more than one Examinee conducting tests at any one time during the performance examination.
- iv. Supplemental Examiners shall not examine anyone on the performance examination who is employed in the same organization. Governmental or other organizations may petition ACI in writing to request a waiver of this requirement. Waivers may be granted if it can be shown that the intended separation from bias will be maintained.

6.0 SPONSORING GROUP CRITERIA

- a. Groups desiring to conduct ACI Certification program(s) shall adhere to the current *Policy on Sponsoring Groups for Certification* (Annex 620.5-3).
- b. It shall be the SG's responsibility to secure the examination space and equipment that conforms to the applicable practices and test methods and is in good working order. Examinees shall not be penalized as a result of faulty or incorrect equipment.

7.0 ACI DUTIES AND RESPONSIBILITIES

- a. ACI shall approve the SG and Examiner(s) to conduct examination sessions for Aggregate Base Testing Technician—AASHTO Methods and/or Aggregate Base Testing Technician—ASTM Methods certification.
- b. ACI shall grade the written examinations, review the performance examinations, and notify the Examinees and the Examiner of the results.
- c. ACI shall certify those individuals who have satisfied the certification requirements, issue certification credentials, and verify active certifications upon request.

8.0 RECERTIFICATION CRITERIA

a. Recertification for either of the Aggregate Base Testing Technician certifications requires the successful completion of the existing Certification Criteria for that program at the time of seeking recertification.