

# Certification Policies for Specialty Commercial/Industrial Concrete Flatwork Finisher, Associate, and Specialist

Last revised by the Certification Programs Committee February 13, 2024

The statements contained herein are a consolidation of approved policies and procedures. This policy statement supersedes all previous action of the ACI Board of Direction with respect to Specialty Commercial/Industrial Concrete Flatwork Personnel certification.

The certification program policies are organized into seven sections as follows:

Section 1.0	Certification Criteria
Section 2.0	Examination Criteria
Section 3.0	Reexamination Criteria
Section 4.0	Appeals Procedures
Section 5.0	Sponsoring Group Criteria
Section 6.0	Examiner, Supplemental Examiner Criteria
Section 7.0	ACI Duties and Responsibilities
Section 8.0	Recertification Criteria

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### SECTION 1.0 CERTIFICATION CRITERIA

- 1.1 The American Concrete Institute (ACI) certification program includes *Specialty Commercial/Industrial Concrete Flatwork Finisher, Specialty Commercial/Industrial Concrete Flatwork Associate,* and *Specialty Commercial/Industrial Concrete Flatwork Specialist* categories.
- 1.2 Certification as a *Specialty Commercial/Industrial Concrete Flatwork Associate* requires only the successful completion of the written examination [See Sections 2.6–2.9].
- 1.3 Certification as a <u>Specialty Commercial/Industrial Concrete Flatwork Finisher</u> requires:
  - A) Prior or current certification as an ACI Advanced Concrete Flatwork Finisher

ACI Advanced Concrete Flatwork Finisher certification program content and operation are described in ACI Certification Policies for Advanced Concrete Flatwork Finisher, Concrete Flatwork Finisher, Concrete Flatwork Associate, Annex C640.2-1.

AND

B) Current certification as a Specialty Commercial/Industrial Concrete Flatwork Associate

AND

C) A minimum of 2000 hours of commercial and/or industrial concrete flatwork construction work experience [See Sections 2.14 - 2.17]

AND

- D) Performance Examination Successful completion of Section I of the performance examination [See Sections 2.10 - 2.13]
- 1.4 Certification as a *Specialty Commercial/Industrial Concrete Flatwork Specialist* requires:
  - A) Current certification as a Specialty Commercial/Industrial Concrete Flatwork Finisher

AND

- B) Performance Examination [See Sections 2.10–2.13]
  - 1. Successful completion of Section II of the performance examination for the *High Tolerance* designation.
- 1.5 ACI Commercial/Industrial Flatwork Certifications shall be valid for a period of five [5] years from the date of completion of all applicable certification requirements, except as detailed in 1.6.
- 1.6 A Specialty Commercial/Industrial Concrete Flatwork Associate may upgrade to Specialty Commercial/Industrial Concrete Flatwork Finisher at any time during the five [5] year certification period by completing the certification requirements detailed in Sections 1.3.A, 1.3.C, and 1.3.D. The upgraded designation shall be valid for the remainder of the original five [5] year certification period.

#### **SECTION 2.0 EXAMINATION CRITERIA**

- 2.1 The content of the written and performance examinations shall be derived directly from the Job Task Analysis for Specialty Commercial/Industrial Concrete Flatwork Finisher, Associate, and Specialist Certification (Annex 640.2-2).
- 2.2 There will be questions regarding general concrete technology on the written examination. The examinee will be expected to have a basic knowledge of proper finishing procedures for concrete flatwork.
- 2.3 The examination(s) shall be conducted by the ACI approved examiner, proctors, and/or supplemental examiners as applicable. [See Section 6.0]
- 2.4 The ACI approved examiners, proctors, supplemental examiners, and/or sponsoring groups shall not have any jurisdiction over the content of the examination(s), or over the grading of the written examination.
- 2.5 Both the written and performance examination are closed book. Notes or other technical material shall not be permitted in the examination area.

#### WRITTEN EXAMINATION

- 2.6 The written examination shall consist of approximately eighty [80] multiple choice questions.
- 2.7 A maximum of two hours shall be permitted for completion of the written examination.
- 2.8 Verbal administration of the written examination shall be permitted, contingent upon approval by the ACI Certification Department.
- 2.9 Successful completion of the written examination shall require a minimum score of 70%.

#### PERFORMANCE EXAMINATION

- 2.10 The examinee must demonstrate skills in the direct presence of the examiner or supplemental examiner.
- 2.11 The examinee's performance shall be evaluated based on the criteria of the performance examination checklist.
- 2.12 The examiner/supplemental examiner shall record the symbols 'P' for passing and 'F' for failing on each step of the checklist.
- 2.13 Immediately following completion of each Section of the performance examination, the examiner/ supplemental examiner shall inform the examinee of the results, either pass or fail.

#### WORK EXPERIENCE

- 2.14 Satisfactory documentation of experience can be provided as follows:
  - A) Experience in concrete flatwork finishing [2000 hours total], after a formal apprentice or training period, in one or more of the following categories:

- 1. Commercial flatwork construction,
- 2. Industrial flatwork construction,
- 3. Application of surface treatments,
- 4. High tolerance (superflat) flatwork construction,
- 5. High performance silica fume concrete flatwork construction.
- B) A signed form(s) or affidavits from current and/or previous employers or other qualified individual(s) verifying that the Candidate possesses the required amount and range of work experience.
- 2.15 Work experience forms from Candidates employed by a company (not self-employed) shall be signed by a human resources representative and project superintendent, or job foremen or owner of a company.
- 2.16 In cases where the Candidate is self-employed, work experience is submitted on at least three (3) Client Affidavit forms reflecting three (3) different projects in three (3) different years.
- 2.17 ACI reserves the right to verify submitted credentials of any candidate or affidavit respondent.

#### SECTION 3.0 RE-EXAMINATION CRITERIA

- 3.1 Failure of the written examination by the criteria cited under Section 2.9 shall require a reexamination on the entire written examination.
- 3.2 Failure on a part of the performance examination shall require re-examination on only that Part.

### SECTION 4.0 APPEALS CRITERIA

Appeals relate to the administration of the exam, not exam content; exam content issues are governed through the challenge procedure described in the question booklet. Examinees who fail either the written or performance exam and feel their knowledge or performance was not fairly assessed due to an administrative issue (e.g., distractions, improper testing environment, etc.), may appeal the decision. Appeals must be made during the exam session and shall be directed to the examiner to facilitate immediate resolution if possible, and to bring the examiner's immediate attention to the issue for documentation and further research and action if warranted. Examiners must return a copy of the documentation with the exam materials, retaining a copy for future reference if needed.

- 4.1 All appeals shall be directed initially to the examiner.
- 4.2 In the event that the examinee is not satisfied with the decision of the examiner regarding an appeal, the examinee may pursue an appeal with ACI according to the following order:
  - 1. Sponsoring Group
  - 2. ACI Managing Director of Certification

- 3. The Certification Appeals Committee [consisting of the Managing Director of Certification, the Certification Programs Committee Chair and the Chair of Committee C 640]
- 4. Committee C 640, Craftsman Certification
- 5. Certification Programs Committee
- 4.3 Appeals not satisfied by the examiner must be received in writing within sixty [60] days of the receipt of the examination at ACI Headquarters.
- 4.4 Appeals submitted to ACI that are not initially directed to the examiner during the exam session will not be considered.

### SECTION 5.0 SPONSORING GROUP CRITERIA

Groups desiring to conduct ACI Certification program(s) shall adhere to the *current Policy on Sponsoring Groups for Certification* (Annex 640.2-3).

#### SECTION 6.0 EXAMINER, SUPPLEMENTAL EXAMINER, AND PROCTOR CRITERIA AND RESPONSIBILITIES

- 6.1 In order to be considered for examiner status, the applicant shall have assisted in the administration of at least two (2) ACI examination sessions (any program including written and performance components where applicable), performing to the satisfaction of the examiner of record;
  - A) Be a graduate of an accredited engineering or construction management program or have experience in concrete technology and finishing verified by at least three letter references from employers, clients, etc., or be an approved ACI Concrete Flatwork Finisher Examiner;

AND

B) Have passed the written exam with 70% or higher;

AND

C) Have a minimum of three years experience in Specialty Commercial/Industrial Flatwork Construction for the specific type of performance examination he/she will administer as referenced in section 6.10 below. Experience can be substantiated by submitting a list of specialty commercial industrial projects where the examiner had been involved including the type of projects and the examiner role and responsibility;

AND

D) Submit qualifications using a current ACI Examiner application.

- 6.2 Examiners are authorized to conduct performance examinations only in the areas for which they are approved:
  - A) Section I Commercial/industrial finishing (use of mechanized finishing tools)
  - B) Section II High tolerance floor construction

Note: It is the intent of this Policy to ensure that examiners possess the knowledge and expertise necessary to evaluate the performance of examinees accurately and effectively in specific methods of concrete construction. Since it is possible for examiners to possess expertise in some areas covered by this program and not others, the Policy is designed to allow for the possibility/likelihood that multiple examiners and evaluations may be needed for proper evaluation across all program areas sought by the participant.

- 6.3 Examiners shall be approved by ACI.
- 6.4 The examiner shall be present and in full supervision during the examination session.
  - Note: Historical administrative experience indicates that a ratio of 5:1 Examinees to Examiners/Supplemental Examiners is advised to facilitate Examiner control of sessions. Exceeding this ratio is permitted if these program policies are maintained throughout the duration of the examination session, and the order, fairness, objectivity and thoroughness of the process intended by the policies are preserved.
- 6.5 Examiners/supplemental examiners, and proctors shall be unrelated professionally and personally to the examinees.
- 6.6 Examiners/supplemental examiners shall not examine anyone on the performance examination who is employed in the same organization. Governmental organizations may be granted a waiver of this requirement only if it can be shown that the intent of the policy will be maintained.
- 6.7 Supplemental examiners shall be permitted to assist in conducting the performance examination.
- 6.8 Supplemental examiners shall satisfy the following requirements:
  - A) Have had recent experience in concrete finishing;
  - B) Be selected and adjudged qualified by the examiner; AND
  - C) Be considered trustworthy and conscientious.
- 6.9 Proctors shall be permitted to assist the examiner in conducting the written examination.
- 6.10 Proctors shall be selected by the examiner by virtue of their being trustworthy and conscientious.
- 6.11 The examiner shall be directly responsible for the following:
  - A) Final approval of the supplemental examiners and proctors;

- B) Verify conformance to Sections 6.4 and 6.5 of this Policy;
- C) Order and receive examinations;
- D) Verify the identity of each examinee, and assure that the examinees are aware of the certification criteria;
- E) Verify the performance examinations conducted by the supplemental examiners by co-signing the performance examination checklists;
- F) Enter the appropriate grade for the completed performance examination on the checklists; and
- G) Return all written examinations (used and unused), performance examinations and performance affidavits to ACI Headquarters.
- 6.12 Examiners, supplemental examiners or proctors are not allowed to define terms or interpret examination questions during the written examination.
- 6.13 The examination session(s) must be supervised constantly by the examiner, and when required, by the supplemental examiner(s) and/or proctor(s).

### SECTION 7.0 ACI DUTIES AND RESPONSIBILITIES

- 7.1 ACI shall approve the sponsoring group.
- 7.2 ACI shall approve the examiner.
- 7.3 ACI shall authorize the sponsoring group to conduct examination sessions for Concrete Flatwork certifications.
- 7.4 ACI shall grade the written examinations, review the results of the performance examinations, verify work experience, and notify the examinee and the examiner of the final results.
- 7.5 ACI shall certify the examinees who have satisfied the certification requirements.
- 7.6 ACI shall issue a certificate and identification card to successful examinees.

#### SECTION 8.0 RECERTIFICATION CRITERIA

Recertification is the process of renewing the period of validity to five [5] years from the date of completion of all applicable recertification requirements. The recertification requirements for this program are equivalent to the certification requirements, see 1.2-1.4.

# **End of Policy Text**



# Certification Policies for Advanced Concrete Flatwork Finisher, Concrete Flatwork Finisher, Concrete Flatwork Associate

Last revised by the Certification Programs Committee February 13, 2024

The statements contained herein are a consolidation of approved policies and procedures. This policy statement supersedes all previous action of the ACI Board of Direction with respect to Concrete Flatwork Personnel certification.

The certification program policies are organized into seven sections as follows:

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### SECTION 1.0 CERTIFICATION CRITERIA

- 1.1 The American Concrete Institute (ACI) certification program includes *Advanced Concrete Flatwork Finisher*, *Concrete Flatwork Finisher*, and *Concrete Flatwork Associate* categories.
- 1.2 Certification as an <u>Advanced Concrete Flatwork Finisher</u> requires:
  - A) Written Examination Successful completion of a written examination. [See Section 2.9]

AND

- B) Work Experience/Performance Examination [See Sections 2.10 2.23]
  - 1. A minimum of three years [4500 hours] of direct finishing experience

OR

- 2. A minimum of one year [1500 hours] of direct finishing experience <u>and</u> successful demonstration of hand skills through a performance examination.
- 1.3 Certification as a *Concrete Flatwork Finisher* requires:
  - Performance Examination Successful completion of a performance examination. [See Sections 2.10-2.17]

AND

- B) Work Experience—A minimum of one year [1500 hours] of direct finishing experience [See Sections 2.20- 2.23]
- 1.4 Certification as a <u>Concrete Flatwork Associate</u> requires only the successful completion of the written examination.
- 1.5 ACI Flatwork Certifications shall be valid for a period of five [5] years from the date of completion of all applicable certification requirements.
- 1.6 A Concrete Flatwork Finisher may upgrade to Advanced Concrete Flatwork Finisher at any time during the five [5] year certification period by passing the written examination.
- 1.7 If a Finisher upgrades to Advanced Finisher status, certification as an Advanced Finisher shall be valid for the remainder of the original Finisher certification period.

#### **SECTION 2.0 EXAMINATION CRITERIA**

- 2.1 The content of the written and performance examinations shall be derived directly from the Job Task Analysis for Advanced Concrete Flatwork Finisher, Concrete Flatwork Finisher, and Concrete Flatwork Associate Certification (Annex 640.1-1).
- 2.2 There will be questions regarding general concrete technology on the written examination. The examinee will be expected to have a basic knowledge of proper finishing procedures for concrete flatwork.
- 2.3 The examination(s) shall be conducted by the ACI approved examiner, proctors, and/or supplemental examiners as applicable. [See Section 6.0]
- 2.4 The ACI approved examiners, proctors, supplemental examiners, and/or sponsoring groups shall not have any jurisdiction over the content of the examination(s), or over the grading of the written examination.
- 2.5 Both the written and performance examination are closed book. Notes or other technical material shall not be permitted in the examination area.

#### WRITTEN EXAMINATION

- 2.6 The written examination shall consist of at least fifty [50] multiple choice and/or true/false questions.
- 2.7 A maximum of two hours shall be permitted for completion of the written examination.
- 2.8 Verbal administration of the written examination shall be permitted, contingent upon approval by the ACI Certification Department.
- 2.9 Successful completion of the written examination shall require a minimum score of 70%.

#### PERFORMANCE EXAMINATION

- 2.10 The examinee must place, finish, edge, joint, and begin curing a concrete slab in the direct presence of the examiner or supplemental examiner.
- 2.11 The examinee's performance shall be evaluated based on the criteria of the performance examination checklist.
- 2.12 The examiner/supplemental examiner shall record the symbols 'P' for passing and 'F' for failing on each step of the checklist.
- 2.13 A passing grade in each Part 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.
- 2.14 Each Part of the exam must be successfully completed according to the aforementioned criteria.
- 2.15 Immediately following completion of each Part of the performance examination, the examiner/ supplemental examiner shall inform the examinee of the results, either pass or fail.
- 2.16 If the first trial was not successfully completed, a second trial shall be allowed after each other examinee has had a turn.

2.17 Examinees who fail a second trial, may arrange with the examiner to take the performance examination on another day.

### WORK EXPERIENCE

- 2.18 Candidates seeking Advanced Concrete Flatwork Finisher certification shall be exempt from taking the performance examination if satisfactory documentation of experience can be provided as follows:
  - A) Experience in concrete flatwork finishing {3 years [4500 hours] total}, after a formal apprentice or training period, including experience in placement, consolidation, finishing, jointing, curing and protection of concrete flatwork.
  - B) A signed form(s) or affidavits from current and/or previous employers or other qualified individual(s) verifying that the Candidate possesses the required amount and range of work experience.
- 2.19 Candidates seeking Advanced Concrete Flatwork Finisher certification who successfully pass the Performance Examination must also include satisfactory documentation of experience as follows:
  - A) Experience in concrete flatwork finishing {1 year [1500 hours] total}, including experience in placement, consolidation, finishing, jointing, curing and protection of concrete flatwork.
  - B) A signed form(s) or affidavits from current and/or previous employers or other qualified individual(s) verifying that the Candidate possesses the required amount and range of work experience.
- 2.20 Candidates seeking Concrete Flatwork Finisher certification who successfully pass the Performance Examination must also include satisfactory documentation of experience as follows:
  - A) Experience in concrete flatwork finishing {1 year [1500 hours] total}, including experience in placement, consolidation, finishing, jointing, curing and protection of concrete flatwork.
  - B) A signed form(s) or affidavits from current and/or previous employers or other qualified individual(s) verifying that the Candidate possesses the required amount and range of work experience.
- 2.21 Work experience forms from Candidates employed by a company (not self-employed) shall be signed by a human resources representative and project superintendent, or job foremen or owner of a company.
- 2.22 In cases where the Candidate is self-employed, work experience is submitted on at least three (3) Client Affidavit forms reflecting three (3) different projects in three (3) different years.
- 2.23 ACI reserves the right to verify submitted credentials of any candidate or affidavit respondent.

#### SECTION 3.0 RE-EXAMINATION CRITERIA

- 3.1 Failure of the written examination by the criteria cited under Section 2.9 shall require a reexamination on the entire written examination.
- 3.2 Failure on a part of the performance examination shall require re-examination on only that Part.

### SECTION 4.0 APPEALS CRITERIA

Appeals relate to the administration of the exam, not exam content; exam content issues are governed through the challenge procedure described in the question booklet. Examinees who fail either the written or performance exam and feel their knowledge or performance was not fairly assessed due to an administrative issue (e.g., distractions, improper testing environment, etc.), may appeal the decision. Appeals must be made during the exam session and shall be directed to the examiner to facilitate immediate resolution if possible, and to bring the examiner's immediate attention to the issue for documentation and further research and action if warranted. Examiners must return a copy of the documentation with the exam materials, retaining a copy for future reference if needed.

- 4.1 All appeals shall be directed initially to the examiner.
- 4.2 In the event that the examinee is not satisfied with the decision of the examiner regarding an appeal, the examinee may pursue an appeal with ACI according to the following order:
  - 1. Sponsoring Group
  - 2. ACI Managing Director of Certification
  - 3. The Certification Appeals Committee [consisting of the Managing Director of Certification, the Certification Programs Committee Chairman and the Chairman of Committee C 640]
  - 4. Committee C 640, Craftsman Certification
  - 5. Certification Programs Committee
- 4.3 Appeals not satisfied by the examiner must be received in writing within sixty [60] days of the receipt of the examination at ACI Headquarters.
- 4.4 Appeals submitted to ACI that are not initially directed to the examiner during the exam session will not be considered.

### SECTION 5.0 SECTION 5.0 SPONSORING GROUP CRITERIA

Groups desiring to conduct ACI Certification program(s) shall adhere to the *current Policy on Sponsoring Groups for Certification* (Annex 640.1-2).

#### SECTION 6.0 EXAMINER, SUPPLEMENTAL EXAMINER, AND PROCTOR CRITERIA AND RESPONSIBILITIES

- 6.1 Examiners for the written exam shall meet the following requirements:
  - A) Shall have assisted in the administration of at least two (2) ACI written examination sessions (any program), performing to the satisfaction of the examiner of record
- 6.2 Examiners for the performance exam shall meet the following requirements:
  - A) Be certified as a Concrete Flatwork Finisher, Advanced Concrete Flatwork Finisher, or Specialty Commercial/Industrial Concrete Flatwork Finisher at any time within the 10 years prior to application, AND
  - B) Shall have assisted in the administration of at least four (4) ACI performance examination sessions (any program), performing to the satisfaction of the examiner of record
- 6.3 Examiners shall submit qualifications using a current ACI Examiner application.
- 6.4 Examiners shall be approved by ACI.
- 6.5 The examiner shall be present and in full supervision during the examination session.
  - Note: Historical administrative experience indicates that a ratio of 5:1 Examinees to Examiners/Supplemental Examiners is advised to facilitate Examiner control of sessions. Exceeding this ratio is permitted if these program policies are maintained throughout the duration of the examination session, and the order, fairness, objectivity and thoroughness of the process intended by the policies are preserved.
- 6.6 Examiners/supplemental examiners, and proctors shall be unrelated professionally and personally to the examinees.
- 6.7 Examiners/supplemental examiners shall not examine anyone on the performance examination who is employed in the same organization. Governmental organizations may be granted a waiver of this requirement only if it can be shown that the intent of the policy will be maintained.
- 6.8 Supplemental examiners shall be permitted to assist in conducting the performance examination.
- 6.9 Supplemental examiners shall satisfy the following requirements:
  - A) Have had recent experience in concrete finishing;
  - B) Be selected and adjudged qualified by the examiner; and
  - C) Be considered trustworthy and conscientious.
- 6.10 Proctors shall be permitted to assist the examiner in conducting 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 responsible for the following:
  - A) Final approval of the supplemental examiners and proctors;

- B) Verify conformance to Sections 6.4 and 6.5 of this Policy;
- C) Order and receive examinations;
- D) Verify the identity of each examinee, and assure that the examinees are aware of the certification criteria;
- E) Verify the performance examinations conducted by the supplemental examiners by co-signing the performance examination checklists;
- F) Enter the appropriate grade for the completed performance examination on the checklists; and
- G) Return all written examinations (used and unused), performance examinations and performance affidavits to ACI Headquarters.
- 6.13 Examiners, supplemental examiners or proctors are not allowed to define terms or interpret examination questions during the written examination.
- 6.14 The examination session(s) must be supervised constantly by the examiner, and when required, by the supplemental examiner(s) and/or proctor(s).

### SECTION 7.0 ACI DUTIES AND RESPONSIBILITIES

- 7.1 ACI shall approve the sponsoring group.
- 7.2 ACI shall approve the examiner.
- 7.3 ACI shall authorize the sponsoring group to conduct examination sessions for Concrete Flatwork certifications.
- 7.4 ACI shall grade the written examinations, review the results of the performance examinations, verify work experience, and notify the examinee and the examiner of the final results.
- 7.5 ACI shall certify the examinees who have satisfied the certification requirements.
- 7.6 ACI shall issue a certificate and identification card to successful examinees.

### SECTION 8.0 RECERTIFICATION CRITERIA

### 8.1 Advanced Concrete Flatwork Finisher

Recertification is necessary every five years and requires successful completion of either:

- A) The then-current written examination, OR
- B) Submission and verification of records reflecting work-experience <u>and</u> continuing education during the previous five-year period as enumerated below:
  - 1. Participation in at least 10 hours of approved continuing education. Courses shall be approved by the ACI C640 Committee from offerings from ACI webinars, ACI seminars, ACI Online

Education Presentations, educational offerings from sponsoring groups, relevant World of Concrete Seminars, or other entities offering courses relevant to certification\*; plus

2. Possess 4,500 hours of actual on-the-job finishing experience (approximately three years of regular full-time work).

### 8.2 Concrete Flatwork Finisher

Recertification is necessary every five years and requires successful completion of either:

- A) The then-current performance examination, OR
- B) Submission and verification of records reflecting work-experience <u>and</u> continuing education during the previous five-year period as enumerated below:
  - 1. Participation in at least 10 hours of approved continuing education. Courses shall be approved by the ACI C640 Committee from offerings from ACI webinars, ACI seminars, ACI Online Education Presentations, educational offerings from sponsoring groups, relevant World of Concrete Seminars, or other entities offering courses relevant to certification\*; plus
  - 2. Possess 1,500 hours of actual on-the-job finishing experience (approximately one year of regular full-time work).

### 8.3 Concrete Flatwork Associate

Recertification is necessary every five years and requires successful completion of either:

- A) The then-current written examination, OR
- B) Continuing education during the previous five-year period as enumerated below:
  - 1. Participation in at least 10 hours of approved continuing education. Courses shall be approved by the ACI C640 Committee from offerings from ACI webinars, ACI seminars, ACI Online Education Presentations, educational offerings from sponsoring groups, relevant World of Concrete Seminars, or other entities offering courses relevant to certification.\*

\*Note: Approved courses include but may not be limited to those listed in Annex 640.1-3. Courses/Seminars will be considered for their approval based their content's relevance of concrete flatwork. Review and approval of new courses will be the responsibility of C640. Each seminar/course may be submitted only once per five year period; credit will not be given for the same course attended more than once during the five year period.

# **End of Policy Text**

### Job-Task Analysis (JTA) for ACI Certification of Specialty Commercial/Industrial Concrete Flatwork Finisher and Associate

### How to Use this JTA:

For each of the following assessment methods, the Candidate must:

### On the written examination:

- **Understand** the following general concepts, which may not have specified values, procedures, or measurements; *and*
- **Know** the following specific procedures or values; performance of these items may also be assessed on the performance examination.

On the performance examination:

• **Perform**—or describe verbally, where allowed—the following tasks or steps, which are part of the specified procedure; knowledge of these items may also be assessed on the written examination.

### **RESOURCES IN THIS PROGRAM:**

ACI 302.1R Guide for Concrete Floor and Concrete Slab Construction Silica Fume User's Manual

### ACI 302.1R Guide for Concrete Floor and Concrete Slab Construction, Chapters 1–4

- Understand the basis used to classify floors.
- Know and perform the sealing requirements for vapor retarders and barriers.
- Understand the selection criteria for a vapor retarder or barrier.
- Understand when moisture protection is essential.
- Be able to identify when to begin machine operations for concrete placed on a vapor retarder.
- Know how to handle forms that have been damaged by rain.
- Know the slab thickness requirements over supporting steel.
- Understand the soil-support system characteristics.
- Know how proof-rolling is accomplished.
- Know the tolerance for rough grading.
- Know the maximum base penetration for a tire of a loaded concrete truck mixer.
- Be able to set forms and screed guides for positive drainage.
- Know the maximum and ideal temperature differentials between the temperature of the base and the concrete at the time of placement.
- Know the proper use of heaters.

### ACI 302.1R Guide for Concrete Floor and Concrete Slab Construction, Chapters 5–7

- Understand mixture proportioning with regards to shrinkage.
- Understand the cements used for high early strength.
- Understand the cements used in shrinkage compensating floors.
- Understand the preference for natural sand and gradation to minimize water demand.
- Know the requirements for maximum size of coarse aggregates.
- Understand what type of aggregates are frequently used as surface treatments.
- Know when and when not to use air entrainment and why.
- Know the effect of high-range water-reducing admixtures on slump at point of placement.
- Understand the significant contributors to corrosion of steel in concrete.
- Understand the benefits of using silica fume in concrete.

### Job-Task Analysis (JTA) for ACI Certification of Specialty Commercial/Industrial Concrete Flatwork Finisher and Associate

- Understand the benefits of synthetic fibers for plastic concrete.
- Know when and when not to use evaporation retarders and why.
- Understand when and when not to use elastomeric sealants.
- Understand why accurate batching of admixtures and colored pigments is critical.
- Know how to determine the length of the period after arrival at the jobsite during which the concrete can properly be worked.

### ACI 302.1R Guide for Concrete Floor and Concrete Slab Construction, Chapters 8.1–8.3

- Understand the most efficient way to place concrete in large areas.
- Understand the coordination of operations.
- Be able to place concrete at an appropriate rate.
- Know the proper sizing of finishing crews.
- Understand what tools should not be used to spread concrete.
- Understand how concrete should be delivered with regards to segregation of the concrete components.
- Know the concerns of spreading by vibration.
- Know proper use of a vibrator.
- Be able to remove slight imperfections, humps, and voids.
- Be able to demonstrate when to begin floating.
- Know how to determine when mechanical pan floating should begin.
- Know how to achieve flatness/levelness within tolerances.
- Understand which floor-placing and finishing operations have the greatest effect on achieving the specified grade.
- Know when to use wet-screed guides.
- Understand the use of a bull float for floor flatness greater than FF20.
- Understand when wooden bull floats are preferable.
- Know the purpose and use of the modified highway straightedge.

### ACI 302.1R Guide for Concrete Floor and Concrete Slab Construction, Chapters 8.4–8.17

- Understand flatness F-number (FF).
- Understand levelness F-number (FL).
- Understand the designation and range of FF/FL.
- Know how and when to remove water from the surface of green concrete.
- Be able to start, stop, and maneuver the power trowel around the slab.
- Be able to control the power trowel while finishing the edge of the slab.
- Be able to machine trowel with the blades at the proper angle.
- Be able to cross-check the slab perpendicular to placement and at 45-degree angles.
- Be able to cut down the slab after initial strike-off.
- Be able to apply the surface treatment at the proper time in the slab construction sequence.
- Be able to apply appropriate amounts of surface treatment material in the appropriate manner.
- Be able to properly work aggregate into the top surface.
- Be able to place silica fume concrete in a controlled manner.
- Be able to strike off the surface in a proper manner.

### Job-Task Analysis (JTA) for ACI Certification of Specialty Commercial/Industrial Concrete Flatwork Finisher and Associate

- Be able to demonstrate immediate surface closure with steel fresno or magnesium trowel.
- Be able to employ minimal finishing and surface manipulation.
- Be able to properly provide early age surface evaporation protection.
- Be able to properly apply final texturing of the surface.
- Be able to demonstrate the timing of final surface protection and curing.

### ACI 302.1R Guide for Concrete Floor and Concrete Slab Construction, Chapter 9

- Know the purpose of curing.
- Know the provisions for properly finishing joint filling if timing dictates that joints be filled early.
- Understand why it is advisable to defer joint filling and sealing as long as possible.
- Know the maximum temperature difference between curing water and the concrete to avoid thermal shock.
- Understand when to place wet coverings.
- Understand how to properly use wet coverings.
- Understand when to apply liquid membrane-forming curing compounds.
- Understand the moisture retention requirements for liquid membrane-forming curing compounds.
- Understand the proper curing of joints.
- Know when and be able to begin the curing process.
- Know how to and be able to properly protect the surface if concrete begins to dry excessively before completion of finishing operations.
- Understand cold-weather protective measures.
- Understand the causes of plastic-shrinkage cracking.
- Understand the timing of grinding.

### ACI 302.1R Guide for Concrete Floor and Concrete Slab Construction, Chapters 10–11

- Know how to and be able to perform slightly modified finishing techniques for when surface crusting occurs.
- Understand the effect of water content on the amount of drying shrinkage.
- Know the long-term causes of cracking.
- Understand the causes of and preventive measures for low wear resistance.

### Silica Fume User's Manual, Chapters 1–3

- Understand the effects of silica fume in concrete.
- Understand what admixtures allow for the use of silica fume in concrete.
- Know the proportioning relationship between silica fume and other cementitious materials.
- Know the effects of silica fume in concrete on allowable slumps for placement.

### Silica Fume User's Manual, Chapters 7–9

- Understand the need for coordination between the concrete contractor and the silica-fume concrete supplier.
- Know the purpose and method for selecting slump for silica-fume concrete.
- Know the difficulties of working with silica-fume concrete.

### Job-Task Analysis (JTA) for ACI Certification of Specialty Commercial/Industrial Concrete Flatwork Finisher and Associate

- Be able to demonstrate protecting the surface of silica-fume concrete from drying.
- Be able to demonstrate when to begin curing silica-fume concrete.
- Be able to demonstrate how long to cure silica-fume concrete.
- Be able to perform one-pass finishing.
- Be able to perform appropriate consolidation of silica-fume concrete.

# AMERICAN CONCRETE INSTITUTE

# Policy on Sponsoring Groups for Certification

### Approved by the ACI Board of Direction March 21, 1991

### Last revised by the ACI Certification Programs Committee October 18, 2011

In developing certification exams for the concrete construction industry, the American Concrete Institute (ACI) has set forth minimum criteria by which an individual's proficiency is to be judged. Typically, ACI is not in a position to deliver certification exams directly to participants; therefore, it is necessary for ACI to have the ability to delegate this authority. However, if the need arises, ACI reserves the right to conduct exam sessions itself according to each program Policy.

In order to allow others to deliver its certification exams, ACI has adopted the "Sponsoring Group" concept. Sponsoring Groups act as agents of ACI in the delivery of ACI certification exams. Therefore, prior to being selected as an ACI Sponsoring Group, and for the duration of the period in which the group is authorized to act as a Sponsoring Group, such groups are subject to the following policies:

- 1. Sponsoring Groups shall be approved, in writing, by ACI's Certification Department (hereafter referred to as ACI) before they will be permitted to conduct an ACI<sup>1</sup> certification exam session. In all cases, approval of Sponsoring Groups shall be at the sole discretion of ACI.
- 2. In reviewing applications, ACI will consider, among other factors, the following:
  - A) The ability and willingness of the applicant to include in their constituency segments of the concrete construction industry impacted by the exams which they have applied to conduct. This includes individuals involved in the specification, production, design, construction, testing and inspection of concrete and concrete products. The applicant must establish a governance structure with representation appropriate to all of the exams for which the applicant has applied.

For the purposes of this policy, references to "ACI certification" and "ACI certification program(s)" include only those administered solely by ACI (ACI programs). Programs with cosponsors are not directly addressed by this Policy.

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- B) The interest, experience and technical expertise necessary to conduct exam sessions exhibited by the applicant and/or their certification governance structure.
- C) The legitimate need for the applicant to conduct a specific ACI certification exam within their approved operational jurisdiction.
- D) The primary objective of the applicant in applying for sponsorship, which must coincide with ACI's overall mission of improving the quality of concrete construction within the political, social, and cultural dynamics of the intended operational jurisdiction.
- 3. Sponsoring Groups are required to maintain a governance structure to oversee the delivery of ACI exams. The governance structure shall consist of a committee of at least three (3) individuals, each working for a different employer and each producing a different product or service related to the concrete construction industry. At all times, at least one (1) member of the committee shall be a member of ACI. Further, ACI shall be furnished with a complete and accurate listing of contact information for all committee members including names, employers, type of businesses, physical addresses, email addresses, and both office telephone and cell phone numbers as available.
- 4. The certification committee shall obtain the services of ACI-approved examiners. The examiners shall operate under the direct supervision of the certification committee to conduct ACI certification exam sessions. Examiners are permitted to conduct ACI certification exam sessions only under the auspices of ACI or ACI-approved Sponsoring Groups; and they must comply with all ACI certification policies and procedures.
- 5. At the time of approval, ACI shall assign Sponsoring Groups specific geographical areas within which they will have authority to conduct ACI certification exam sessions. This area is the approved operational jurisdiction for the Sponsoring Group.
- 6. ACI shall approve each Sponsoring Group on a calendar year basis for a period not to exceed two (2) years. Prior to the conclusion of this period, all groups shall reapply to ACI for approval to continue to act as an ACI Sponsoring Group.
- 7. In the U.S., in areas where no Sponsoring Group is actively administering a specific ACI examination, the local ACI chapter (not a student chapter) shall have first rights to administer that specific exam. International sponsorship for any ACI examination will be assessed on a case-by-case basis.

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- 8. If an existing Sponsoring Group or ACI Chapter is solicited to administer an examination and participation is declined, or if a sponsor does not request an examination upon initial availability from ACI, or if a requested examination is not administered within two years following approval, administration of said examination may become available to other potential sponsors.
- 9. If more than one applicant wishes to sponsor an ACI certification exam in the same operational jurisdiction and there is documented need for more than one group to conduct the examination in that jurisdiction or portion thereof, a system of coordination between those groups shall be established. A description of this system shall be considered along with any new Sponsoring Group application and must be included in the governance system for any existing Sponsoring Group. In all cases, ACI reserves the right, in its sole discretion, to select a delivery system that in its judgment is best able to serve the interests of ACI.
- 10. Applicants wishing to sponsor ACI certification examinations on a "national" or "regional" basis will, in appropriate circumstances, be approved to conduct exams under specific conditions at the discretion of ACI.
- 11. Approved Sponsoring Groups are responsible for:
  - A) Maintaining control over the administration of ACI Certification exams offered within their operational jurisdiction. This includes, but is not limited to, maintaining control over the ethical and professional integrity of every sponsored examination session and providing ongoing oversight of exam session coordinators, examiners, and other exam delivery personnel.
  - B) Conducting a sufficient number of exam sessions and providing equitable access to those exam sessions for all individuals seeking ACI Certification within the group's operational jurisdiction.
  - C) Conducting all ACI exams in a manner which complies with the intent of ACI's policies and procedures governing certification.
  - D) Formulating, publishing, and enforcing consistent and equitable pricing for ACI Certification exams offered by the Sponsoring Group within their operational jurisdiction.
  - E) Developing and implementing participant registration processes that satisfy the policy requirements of each exam offered by the Sponsoring Group and verifying that each participant has met the eligibility requirements of the program before being allowed to complete an ACI exam.

# Policy on Sponsoring Groups for Certification

- F) Collecting exam fees from participants, paying materials invoices to ACI within 30 days of receipt, and distributing compensation to examiners and other program delivery personnel as warranted.
- G) Developing a program delivery process that establishes separation between the education/training and testing divisions of the Sponsoring Group.
- 12. ACI has the right to revoke a Sponsoring Group's authority to conduct an ACI certification exam at any time, with or without cause, and with or without notice.
- 13. Appeals resulting from the denial or revocation of Sponsoring Group status will be reviewed by ACI Staff for determination of appropriate action on a case-by-case basis.
- 14. This policy shall become effective sixty (60) days after its approval by the ACI Certification Programs Committee, and shall render all previous Policy versions null and void. Sponsoring Groups shall be notified of this new policy in writing within thirty (30) days after it is approved by the ACI Certification Programs Committee.
- 15. The Certification Programs Committee shall review, revise as necessary, and reapprove this Policy at intervals not exceeding two years in length.