

Certification Policies for Self-Consolidating Concrete Testing Technician

Last approved by the Certification Programs Committee March 5, 2024

The statements contained herein are approved policies and procedures. This revised policy statement supersedes all previous action with respect to Self-Consolidating Concrete Testing Technician certification.

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

Section 1.0	Certification Criteria
Section 2.0	Definitions
Section 3.0	ACI Responsibilities
Section 4.0	Examiner, Supplemental Examiner, and Proctor Criteria and Responsibilities
Section 5.0	Examination Criteria
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SECTION 1.0 CERTIFICATION CRITERIA

- 1.01 The American Concrete Institute (ACI) certification program for Self-Consolidating Concrete Testing Technician shall require successful completion of both a written examination and a performance examination.
- 1.02 No specific education or work experience are required as prerequisites for Self-Consolidating Concrete Testing Technician certification.
- 1.03 ACI certification for Self-Consolidating Concrete Testing Technician shall be valid for a period of five [5] years from the date of completion of all certification requirements.
- 1.04 Recertification requires the successful completion of both a written and performance examination according to Section 5 of this policy.
- 1.05 Groups desiring to conduct ACI Certification program(s) shall adhere to the current *Policy on Sponsoring Groups for Certification* (Annex 612.1-1).

SECTION 2.0 DEFINITIONS

- 2.01 Examinee a person taking either the written or performance examination, or both.
- 2.02 Examiner a person authorized by ACI to be in responsible charge of an examination session.
- 2.03 Performance Exam Checklist a list of criteria used by the supplemental examiner to judge the compliance of the examinee with the provisions of the performance examination.
- 2.04 Proctor a person authorized to assist the Examiner in conducting the written examination.
- 2.05 Supplemental Examiner a person who assists the Examiner by administering the performance examination.

SECTION 3.0 ACI RESPONSIBILITIES

- 3.01 ACI shall assemble, maintain and distribute all examination materials.
- 3.02 ACI shall approve the local sponsoring group.
- 3.03 ACI shall authorize the local sponsoring group to conduct examination sessions for Self-Consolidating Concrete Testing Technician certification.
- 3.04 ACI shall approve the examiner.
- 3.05 ACI shall grade the written examinations, review the performance examinations, and notify the examinee and the examiner of the final results in writing.
- 3.06 ACI shall certify examinees who meet the certification requirements.

3.07 ACI shall issue credentials to examinees who meet the certification requirements.

SECTION 4.0 EXAMINER, SUPPLEMENTAL EXAMINER, AND PROCTOR CRITERIA AND RESPONSIBILITIES

- 4.01 To maintain access to ACI examination materials, the examiner shall maintain approval from ACI and authorization from the Sponsoring Group.
- 4.02 Individuals seeking to become ACI-approved examiners shall submit their qualifications to ACI.
- 4.03 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, and satisfy either A or B as follows:
 - A) For registered professional engineers:
 - 1. Be a registered professional engineer or hold equivalent international credentials; and
 - 2. Have at least two (2) years of verifiable experience in concrete construction, inspection, or testing; and
 - 3. Be thoroughly familiar with the current applicable standards.

OR

- B) For non-registered individuals:
 - 1. Be certified as an ACI Self-Consolidating Concrete Testing Technician at the time of application; and
 - 2. Have at least five (5) years verifiable experience in ACI certification administration or concrete construction, inspection, or testing; and
 - Have participated in at least four (4) ACI examination sessions—which may include any field- or laboratory-based concrete testing technician program—as a supplemental examiner. This requirement is in addition to the administration assistance stated above in Section 4.03 but may be completed concurrently.
- 4.04 The examiner shall be present at, and supervise, the examination session.
- 4.05 The examiner shall be directly responsible for the following activities:
 - A) Select the supplemental examiners and proctors;
 - B) Verify the qualifications of the supplemental examiners and proctors according to the criteria outlined in Section 4.06 through 4.12 of this policy;

- C) Order examinations;
- D) Verify the identity of each examinee;
- E) Ensure that the examinees are aware of the certification criteria;
- F) Verify that the examinees have signed the release statement on the performance examination prior to performing any test methods or procedures;
- G) Verify the performance evaluations conducted by the supplemental examiners by co-signing the performance examination checklist report;
- H) Enter the appropriate grade for the completed performance examination on the checklist report;
- I) Ensure that all examinees have an opportunity to perform each test method at least once and to take a second trial on any failed procedure of the performance examination;
- J) Refrain from interpreting examination questions during the course of the written examination;
- K) Assist, if requested, the examinee by providing definitions for general use words (i.e. "depict" = "shows"). Examiners shall not define terms specific to the ASTM Standards whose definitions are readily available through adequate study of the Standards.
- 4.06 Proctors may assist the examiner in conducting the written examination.
- 4.07 Proctors shall satisfy the following requirements:
 - A) Be selected, and adjudged qualified by the examiner; and
 - B) Be considered trustworthy and conscientious.
- 4.08 Supplemental examiners shall assist the examiner by conducting the performance examination.
- 4.09 Supplemental examiners shall satisfy the following requirements:
 - A) Have had experience in concrete testing;
 - B) Be selected and adjudged qualified by the examiner;
 - C) Be considered trustworthy and conscientious;
 - D) Be certified as an ACI Self-Consolidating Concrete Testing Technician or be an ACI-approved examiner.
 - E) Be thoroughly familiar with current applicable ASTM Standards as appropriate.
- 4.10 Examiners, supplemental examiners, examiners acting as supplemental examiners and proctors shall not conduct any portion of the examination for anyone with whom he/she is personally related.
- 4.11 Examiners, supplemental examiners, and examiners acting as supplemental examiners shall not examine anyone on the performance examination who is employed in the same organization. Governmental organizations may petition ACI, in writing, and request a waiver of this requirement. Waivers shall be granted only if it can be shown that the intent of the policy will be maintained.

SECTION 5.0 EXAMINATION CRITERIA

- 5.01 The content of the written and performance examinations shall be derived directly from the information listed in the *Job Task Analysis for ACI Self-Consolidating Concrete Testing Technician Certification* (Annex 612.1-2).
- 5.02 Questions regarding general concrete technology shall not be included on either examination.
- 5.03 The examinations shall be conducted by the examiner, proctors, and supplemental examiners as applicable. [See Section 4.]
- 5.04 The examiners, proctors, supplemental examiners, and sponsoring groups have no jurisdiction over the content of either examination, or over the grading of the written examination.
- 5.05 Both the written and performance examinations are closed book. Notes or other technical material related to the subject matter shall not be permitted in the examination area. Non-programmable calculators shall be permitted.

WRITTEN EXAMINATION

- 5.06 The written examination shall consist of approximately fifty [50] multiple choice questions, with six to twelve [6-12] questions on each ASTM Standard.
- 5.07 One hour shall be permitted for completion of the written examination, after which the exam answer sheets must be collected. Additional time, up to one-half hour, with access to the exam question booklet will be allotted to the examinee to facilitate exam question challenges.
- 5.08 If an examinee is incapable of understanding the written examination, it may be administered verbally upon approval of the Examiner.
- 5.09 Successful completion of the written examination shall require the examinee:
 - A) Score sixty percent [60%] or higher on each individual ASTM Standard (i.e. five [5] correct out of eight [8] questions);

AND

B) Score a minimum of seventy percent [70%] for the overall examination (i.e., thirty-five [35] correct out of a possible fifty [50]).

PERFORMANCE EXAMINATION

- 5.10 Successful completion of the performance examination shall require the examinee to satisfactorily perform each of the following ASTM Standard Test Methods: C1610, C1611, C1621, C1712, and C1758.
- 5.11 It shall be the sponsoring group's responsibility to provide equipment which conforms to the applicable ASTM Standards and that is in good working order. The examinee shall not be penalized as a result of faulty or incorrect equipment.

- 5.12 The examinee shall conduct the performance examination in the direct presence of the supplemental examiner or the examiner when acting as a supplemental examiner.
- 5.13 Supplemental examiners and examiners acting as supplemental examiners shall observe only one examinee conducting tests at a time while conducting the performance examination.
- 5.14 At the conclusion of performing each test method the examinee must record the results of the test.
- 5.15 The examinee's performance shall be evaluated based on the criteria of the performance examination checklist.
- 5.16 The supplemental examiner shall indicate pass, fail or not applicable for each step on the checklist.
- 5.17 Grading for the performance examination shall be on a pass/fail basis only.
- 5.18 An examinee shall be permitted to suspend one trial and begin the procedure over again. A voluntary suspension of a trial shall not be counted as a failure of that trial.
- 5.19 The supplemental examiner shall not stop a trial at any point which an error is made.
- 5.20 Incorrect performance, incorrect order of performance, or omission, of one or more of the steps of the performance checklist shall constitute failure of that trial.
- 5.21 Performance of extraneous steps not part of the standard test or procedure shall constitute failure of that trial.
- 5.22 An examinee shall be allowed a second trial for each standard test method if the first trial was not successfully completed.
- 5.23 The second trial of a particular test shall not be conducted immediately following the first trial.
- 5.24 The second trial shall be administered by a different supplemental examiner than the first trial if more than one supplemental examiner is available.
- 5.25 A second trial, or voluntary repeat of a trial, shall require performance of the entire test method from the beginning, not from the point the error was made.
- 5.26 Immediately following completion of each trial, the supplemental examiner shall inform the examinee of the results, either pass or fail.
- 5.27 When a failure of a trial has occurred, the supplemental examiner shall inform the examinee of the particular step(s) performed incorrectly.
- 5.28 The examinee shall be permitted to leave the examining area between trials to consult notes or books.
- 5.29 Failure on any of the prescribed ASTM Standards after two [2] trials will constitute failure of that part of the performance examination.

SECTION 6.0 RE-EXAMINATION CRITERIA

- 6.01 Failure of the written examination by either of the criteria cited under Section 5.09 shall require a reexamination on the entire written examination.
- 6.02 Invalidation of the performance examination (for example non-conformance with Section 4.11) or **failure on one [1] or more** of the five [5] required ASTM Standards shall require reexamination on the entire performance examination.
- 6.03 Reexamination on the written or the performance examination must be taken within one [1] year of the initial examination. Otherwise, both the written and the performance examinations must be retaken in their entireties.

SECTION 7.0 APPEALS CRITERIA

- 7.01 Appeals regarding the conduct of the exam should be made during the exam session and shall be directed to the examiner.
- 7.02 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 Director of Certification
 - 3. The Certification Appeals Committee [consisting of the Director of Certification; the Certification Programs Committee Chairman, and the Chairman of Committee C 612.]
 - 4. Committee C 612, Self-Consolidating Concrete Testing Technician Certification
 - 5. Certification Programs Committee
- 7.03 Appeals submitted directly to ACI for consideration after the exam session must be received, in writing, within sixty [60] days of the receipt of the examination at ACI Headquarters.

End of Policy Text

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 ACI¹ 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.

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- 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.

Job-Task Analysis (JTA) for ACI Self-Consolidated Concrete Testing Technician Certification 1/19/18

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:

- ASTM C1610/C1610M—Standard Test Method for Static Segregation of Self-Consolidating Concrete Using Column Technique
- ASTM C1611/C1611M—Standard Test Method for Slump Flow of Self-Consolidating Concrete
- ASTM C1621/C1621M—Standard Test Method for Passing Ability of Self-Consolidating Concrete by J-Ring
- ASTM C1712—Standard Test Method for Rapid Assessment of Static Segregation Resistance of Self-Consolidating Concrete Using Penetration Test
- ASTM C1758/C1758M—Standard Practice for Fabricating Test Specimens with Self-Consolidating Concrete

ASTM C1610/C1610M—Standard Test Method for Static Segregation of Self-Consolidating Concrete Using Column Technique

- Understand this test method measures segregation of SCC
- Know to what type of concrete the test is applicable
- · Understand this test method provides a procedure to determine the potential static segregation of SCC
- Understand this method is used to develop concrete mixtures to meet specification requirements
- Understand what SCC is
- Know what type of balance is required
- Know the requirements for the column mold
- Know the requirements/dimensions for the collector plate and how to use it
- Know the requirements for the strike-off bar
- Know the type of and requirements for the sieve
- Know the requirements for the sample receptacle
- Know the requirements for the pouring vessel for SCC
- Know other tools may be needed to remix sample or aid in filling pouring vessel
- Understand how to obtain the test sample
- Perform test on a flat, level, vibration free surface
- Perform remixing the sample to ensure it is homogenized
- Perform dampening the interior of the mold, making sure to remove any standing water
- Perform filling pouring vessel with SCC from the sample receptacle immediately
- Perform the filling procedure properly
- Perform filling until slightly above rim and within 2 minutes
- Perform required strike-off of the mold
- Perform allowing concrete to stand undisturbed for 15 ± 1 minute
- · Perform proper holding of mold and removing fastening system
- Perform proper timing requirements
- Perform placing collector plate in appropriate position to collect top portion
- Perform collecting sample onto collector plate and depositing into sample container
- Perform repeating steps to collect sample from middle

Job-Task Analysis (JTA) for ACI Self-Consolidated Concrete Testing Technician Certification 1/19/18

- Perform placing sample from top portion on the 4.75 mm (No. 4) sieve and wash
- Perform depositing washed coarse aggregate into clean plastic pail
- Perform repeating steps for concrete in bottom of mold
- Perform bringing each sample to an SSD condition and obtaining mass of each sample
- Perform calculation of the percent static segregation
- Perform weighing test samples to the nearest 0.05 kg [0.1 lb]
- Perform reporting the static segregation to the nearest 0.1%

ASTM C1611/C1611M—Standard Test Method for Slump Flow of Self-Consolidating Concrete

- Understand this method determines slump flow of SCC
- Know terms specific to this standard
- Understand the use of this test method
- Understand limitation of this test method
- Understand that Appendix X1 provides non-mandatory visual ratings
- Know the VSI values and criteria of Table X1.1
- · Know the requirements for the mold for this test
- Know the requirements for the base plate used in this test
- Know the requirements for the strike-off bar
- Know the requirements for the measuring device and sample receptacle
- Know the requirements for the pouring vessel for SCC
- Know other tools may be needed to remix the sample/aid in filling pouring vessel
- Understand how to obtain the test sample
- Know the test must be performed on a flat, non-absorbent, level, vibration free surface
- Know how to prepare the work surface (dampen)
- Know not to change the base plate during a project or study
- · Know to remix sample to ensure it is homogenized

Performance for Procedure B Only

- Perform preparing the interior of the mold and placing it in correct orientation on the test surface
- Perform correctly filling the poring vessel
- Perform correctly filling the mold to execute the test
- Perform Section 8.4 in its entirety
- Perform Section 8.5 in its entirety
- Know and perform parameters of invalid tests
- Know and perform calculation of the slump flow
- Know and perform recording the average of two diameters to 10 mm [1/2-in.]

ASTM C1621/C1621M—Standard Test Method for Passing Ability of Self-Consolidating Concrete by J-Ring

- Understand this method determines passing ability of SCC using the J-Ring
- Know terms specific to this standard test method
- Understand the use of this test method
- Understand limitations of this test method
- Know all of Section 6
- Know the requirements for the J-Ring
- Know the requirements for the mold for this test
- · Know the requirements for the base plate used in this test
- Know the requirements for the strike-off bar
- · Know the requirements for the measuring device and sample receptacle
- Know the requirements for the pouring vessel for SCC

Job-Task Analysis (JTA) for ACI Self-Consolidated Concrete Testing Technician Certification 1/19/18

- Know other tools may be needed to remix the sample/aid in filling the pouring vessel
- Understand how to obtain the test sample
- Know the test must be performed on a flat, non-absorbent, level surface
- Know how to prepare the work surface
- Know specifics related to changing the base plate during a project or study
- Know where to place the J-Ring on the baseplate
- Know to remix the sample to ensure it is homogenized

Performance for Procedure B Only

- Perform preparing the interior of the mold and place it in correct orientation on the test surface
- Perform correctly filling the poring vessel
- Perform correctly filling the mold to execute the test
- Perform required strike-off of the mold
- Perform cleaning the area surrounding the base of the mold
- Perform removing the mold from the concrete, raising it vertically in 3 ± 1 sec
- · Perform using a steady upward lift with no lateral movement
- Perform the complete test from start of filling mold to removal of mold in 2 minutes, 30 seconds
- · Perform waiting for concrete to stop flowing, then obtaining largest diameter
- Perform and know what to do if a halo is observed
- Perform and know how and where to take the second diameter measurement
- Perform and know measuring diameters to nearest 5 mm [1/4 in.]
- Perform and know parameters of invalid tests
- Perform and know Slump Flow Test with and without the J-Ring
- · Perform and know completing these tests within 6 minutes
- Perform collecting the data and recording the two diameters, including the J-Ring measurement
- Know how to calculate slump flow
- · Know how to calculate the passing ability of the concrete
- Know how to identify the blocking assessment
- Know and perform the reporting requirements of Section 11

ASTM C1712—Standard Test Method for Rapid Assessment of Static Segregation Resistance of Self-Consolidating Concrete Using Penetration Test

- Understand this method provides a rapid assessment of static segregation of SCC
- Know terms specific to this standard test method
- Understand the use of this test method
- Understand limitations of this test method
- Understand Appendix X1 is non-mandatory, but is a tool that can be used
- Know the degrees of static segregation resistance presented in Table X1.1
- Know all of Section 6
- Know the requirements for the mold for this test
- Know the requirements for the penetration apparatus
- Know the requirements for the optional base plate used in this test
- · Know the requirements for the strike-off bar
- Know the requirements for the sample receptacle
- Know the requirements for the pouring vessel for SCC
- Know other tools may be needed to remix the sample/aid in filling the pouring vessel
- Understand how to obtain the test sample
- Know and perform the test on flat, non-absorbent, level, vibration free surface
- Know and perform preparing the work surface
- Know and perform preparing the penetration apparatus for use
- Know and perform remixing the sample to ensure it is homogenized
- Perform preparing the interior of the mold and placing it in correct orientation on the test surface

Job-Task Analysis (JTA) for ACI Self-Consolidated Concrete Testing Technician Certification 1/19/18

- Perform correctly filling the poring vessel
- Perform correctly filling the mold to execute the test
- Perform required strike-off of the mold
- · Perform allowing concrete to stabilize for the required amount of time
- Perform correctly positioning the apparatus on top of the mold
- Perform obtaining initial reading
- Perform obtaining final reading
- Know and perform calculation for the penetration depth
- Know and perform reporting

ASTM C1758/C1758M—Standard Practice for Fabricating Test Specimens with Self-Consolidating Concrete

- Understand the scope of this standard practice
- Understand the limitations of this practice
- Understand definitions of this test practice
- Know the requirements for the specimen container
- Know the requirements for the sample receptacle
- Know the requirements for the pouring vessel for SCC
- Know other tools may be needed to remix the sample/aid in filling the pouring vessel
- Understand how to obtain the test sample

Performed with a 4x8-inch cylinder mold

- · Know and perform preparing the specimen container for test
- Perform correctly filling the poring vessel
- Perform correctly filling the mold to execute the test