

ACI/CRSI Adhesive Anchor Installer Certification

Presented by the Las Vegas Chapter of the American Concrete Institute.



Code/Title: (MO401) ACI/CRSI Adhesive Anchor Installer Review

Date/Time: Monday, January 16 | 8:00 am - 12:00 pm

Trainers: Werner Hellmer, Mike Morrison

ACI and CRSI are pleased to offer a new certification program designed to reflect minimum qualification requirements for installers of adhesive anchors in concrete. ACI 318 Structural Concrete Building Code requires anyone installing adhesive anchors in certain orientations be ACI/CRSI certified. To certify as an ACI/CRSI Adhesive Anchor Installer, candidates must pass a written exam and hands-on performance exam. Separate registration and fees required for review seminar and each exam.

The ACI/CRSI Adhesive Anchor Installer workbook CP-80 (12) is included with performance exam registration (TUAAP). **NOTE: "Seminar Only" attendees should purchase a copy of the workbook CP-80 (12) at the WOC bookstore to serve as the handout for this seminar.**

1. Review the knowledge and skills required to properly install adhesive (epoxy) anchor systems
2. Identify how field practices and environmental factors affect installation quality
3. Recognize the importance of proper installation procedures
4. Discuss the ACI/CRSI certification process, requirements, and preparation needed for the written exam

4.0 continuing education hours approved for AIA/CES (HSW), PDH, and TCA.

MO401 Seminar Fee: \$190; \$225 after 12/1/16 and onsite

Code/Title: (TUAAW) ACI/CRSI Adhesive Anchor Installer Written Examination

Date/Time: Tuesday, January 17 | 8:00 am - 9:30 am

Location: LVCC North Hall

The closed-book, 90-minute written exam consisting of 75 multiple-choice questions based on the ACI/CRSI Adhesive Anchor Installer workbook is scheduled for Tuesday from 8:00 am – 9:30 am. To certify as an ACI/CRSI Adhesive Anchor Installer, candidates must pass both the written exam (TUAAW) and the performance exam (TUAAP). **Separate registration and fees required for each exam.**

IMPORTANT: The ACI/CRSI Adhesive Anchor Installer workbook CP-80 (12) is only included when registering for the performance exam (TUAAP) registration.

TUAAW Written Exam Fee: \$210

Code/Title: (TUAAP) ACI/CRSI Adhesive Anchor Installer Hands-On Performance Examination

Date/Time: Tuesday, January 17 | 10:00 am - 2:00 pm (**select preferred 1.5 hour time slot**)

Location: LVCC Gold Lot, Certification/Training Area

This hands-on performance exam is designed to assess installer's ability to 1) read, comprehend and execute an MPII for installation of an anchor in a vertical-down position; and 2) inject adhesive to the proper depth into simulated holes in an overhead (vertical-up) position with both a retaining cap and piston plug system in a manner that produces no or an acceptable amount of air void(s).

Performance exam registrants will have the opportunity to receive hands-on orientation on several anchor systems and time to practice before taking the exam – open practice session scheduled for Monday, 12-4 pm, following the review seminar. To certify as an ACI/CRSI Adhesive Anchor Installer, candidates must pass both the written exam (TUAAW) and the performance exam (TUAAP). Registered participants must be present at the assigned time of their examination. **Separate registration and fees required for each exam.**

CANCELLATION POLICY: The ACI/CRSI Adhesive Anchor Installer workbook is included with performance exam registration and will be mailed to you prior to the show. **EXCEPTION:** Examinees from outside the United States will receive their study guide the first day of the review seminar. If certification candidate cancels registration for the performance examination, there will be a **\$75 non-refundable fee** to cover the cost of the workbook. To send a replacement to take the exams contact registration@worldofconcrete.com.

NOTE: ACI will provide all required materials and safety equipment for the performance exam; participants must wear long-sleeve shirts/pants and appropriate closed-toe shoes.

NOTE: Space is limited to 5 participants per time slot, so register early!

When registering, attendees will select their preferred one-hour time slot – see schedule below:

TUAAP1: 10:00 am – 11:30 am

TUAAP2: 11:30 am – 1:00 pm

TUAAP3: 1:00 pm – 2:30 pm

TUAAP Performance Exam Fee: \$450

SCHEDULE of EVENTS for the Adhesive Anchor Installer Certification:

- Preparatory 4-hour review seminar (MO401) is scheduled on Monday, 8:00 am – 12:00 pm.
- Hands-on practice session Monday immediately following the seminar between 12:00 pm and 4:00 pm in the Gold Lot is an open workshop which gives attendees an opportunity to observe and participate in demonstrations for each of the installation procedures. You must be registered for the performance exam (TUAAP) in order to attend.
- Written Examination (TUAAW) will be administered Tuesday, from 8:00 am – 9:30 am.
- Performance Examination (TUAAP) takes approximately 1.5 hours to complete and will be held Tuesday from 10:00 am through 4:00 pm in the Gold Lot. When registering, candidates will be asked to select their preferred one-and-a-half-hour time slot.

NOTE: Separate registrations required for 4-hour review MO401 (\$190; \$225 after 12/1/16), written examination TUAAW (\$210 fee), and hands-on performance examination TUAAP (\$450 fee).

Questions about this certification program can be answered
by Las Vegas Chapter ACI at acilasvegas@earthlink.net or 702.656.8827.

NEW! ACI Adhesive Anchor Installer Inspector Certification

Presented by the Las Vegas Chapter of the American Concrete Institute.

Code/Title: (MO402) ACI Adhesive Anchor Installer Inspector Review

Date/Time: Monday, January 16 | 8:00 am - 12:00 pm

Trainer: Werner Hellmer/Mike Morrison



ACI is pleased to offer a new certification program designed to reflect minimum qualification requirements for INSPECTORS related to installation of adhesive anchors in concrete. Changes implemented to ACI 318-11, Structural Concrete Building Code, now require anyone installing adhesive anchors in certain orientations be ACI/CRSI certified. Many inspectors have gone through the current ACI/CRSI Adhesive Anchor Installer (AAI) program in an effort to further develop their knowledge on proper installation of adhesive anchors. Since the ACI/CRSI Adhesive Anchor Installer program does not address Inspector responsibilities, this new program was developed to address those needs.

To certify as an ACI Adhesive Anchor Installer INSPECTOR, candidates are required to:

- Attend ACI Adhesive Anchor Installer Inspector review seminar (MO402),
- Attend ACI/CRSI Adhesive Anchor Installer practice “hands-on” session, and
- Pass the written exam (TUAIW). (*no performance exam required for the inspector program*)

Learning Objectives:

1. Describe knowledge and skills required to properly install adhesive (epoxy) anchor systems
2. Identify field practices and environmental factors affecting installation quality
3. Recognize importance of proper installation procedures
4. List the inspection requirements as per ACI 318-14 and 2015 IBC
5. Summarize requirements of adhesive anchors as per ACI 355.4 and ICC-ES Evaluation Report

The ACI Adhesive Anchor Installer INSPECTOR reference materials are included with the ACI Adhesive Anchor Installer Inspector Written Examination registration (TUAIW). ***NOTE: “Seminar Only” attendees should purchase a copy of the workbook CP-80 (12) at the WOC bookstore to serve as the handout for this seminar.***

MO402 Seminar Fee: \$190; \$225 after 12/1/16 and onsite

Code/Title: (TUAIW) ACI Adhesive Anchor Installer Inspector Written Examination

Date/Time: Tuesday, January 17 | 8:00 am - 10:00 am

Location: LVCC North Hall

The 2-hour written exam is a combination open/closed book exam scheduled for Tuesday, from 8:00 a.m. – 10:00 a.m. The installer portion of the exam is closed book and consists of approximately 45 multiple-choice questions based on the ACI/CRSI Adhesive Anchor Installer workbook, CP-80(12). The inspector portion of the written exam is open book and consists of approximately 55 multiple-choice questions based on the Inspector reference package. Attendees will complete the Installer portion of the exam first then begin the Inspector portion of the exam.

To certify as an ACI Adhesive Anchor Installer INSPECTOR, candidates must pass the written exam and present documentation that they attended the ACI/CRSI Adhesive Anchor Installer “hands-on” practice session. Attendance at the ACI/CRSI Adhesive Anchor Installer “hands-on” practice session, Monday Noon – 4 p.m., is included with this registration. Candidates are required to observe the practice installations but will not actively participate.

ACI/CRSI Adhesive Anchor Installer workbook CP-80 (12), excerpts from ACI 318 and 355.4, a Whitepaper on anchor inspections published by the Concrete Anchor Manufacturers’ Association (CAMA), excerpts from the International Code Council (ICC) 2015 International Building Code, and a typical ICC ESR are included with the written exam registration and will be mailed to the candidate prior to the show.

CANCELLATION POLICY: If the certification candidate cancels registration for the written exam, there will be a **\$90 non-refundable fee** to cover the cost of the workbook. To send a replacement to take the exam contact registration@worldofconcrete.com.

TUAIW Written Exam Fee: \$350

SCHEDULE of EVENTS for the Adhesive Anchor Installer INSPECTOR Certification:

- Preparatory 4-hour review seminar (MO402) is scheduled on Monday, 8:00 am – 12:00 pm.
- Attend and observe the ACI/CRSI Adhesive Anchor Installer Hands-on practice session Monday immediately following the seminar between 12:00 pm and 4:00 pm in the Gold Lot (candidates are required to observe the practice installations but will not actively participate)
- Written Examination (TUAIW) will be administered Tuesday, from 8:00 am – 10:00 am.

NOTE: Separate registrations required for 4-hour review MO402 (\$190; \$225 after 12/1/16) and written exam TUAIW (\$350).

Questions about the certification or examinations can be answered by Las Vegas Chapter ACI at acilasvegas@earthlink.net or 702.656.8827.

ACI Concrete Field Testing Technician – Grade I Certification

Presented by the Las Vegas Chapter of the American Concrete Institute.

Code/Title: (TU405) ACI Concrete Field Testing Technician - Grade I Review

Date/Time: Tuesday, January 17 | 1:00 pm - 5:00 pm

Trainer: Mitch Englestead



This educational/review seminar will provide an overview of the seven ASTM field tests for ready-mixed concrete included in the ACI Concrete Field Testing Technician – Grade I certification program. Participants will review testing procedures and why they are critical in providing accurate and reliable testing results. To certify as a Concrete Field Testing Technician - Grade I, candidates must pass a written exam and hands-on performance exam. **Separate registration and fees required for both exams and review seminar.**

The official workbook for the ACI Concrete Field Testing Technician Grade I certification, CP-1 (16), is included when registering for the performance examination (THFTP). ***NOTE: “Seminar Only” attendees should purchase a copy of the workbook CP-1 (16) at the WOC bookstore to serve as the handout for this seminar.***

Learning Objectives:

1. Outline requirements of the ACI Concrete Field Testing Technician - Grade I program
2. Explain how to properly conduct field tests on freshly mixed concrete
3. Describe how proper procedures result in accurate and reliable results
4. Examine seven ASTM test methods and best practices:
 - a. C1064/C1064M Temperature of Freshly Mixed Hydraulic-Cement Concrete
 - b. C172 Sampling Freshly Mixed Concrete

- c. C143/C143M Slump of Hydraulic-Cement Concrete
- d. C138/C138M Density (Unit Weight), Yield, and Air Content (Gravimetric) of Concrete
- e. C231 Air Content of Freshly Mixed Concrete by the Pressure Method
- f. C173/C173M Air Content of Freshly Mixed Concrete by the Volumetric Method
- g. C31/C31M Making and Curing Concrete Test Specimens in the Field

4.0 continuing education hours approved for AIA/CES (HSW), PDH, and TCA.

TU405 Seminar Fee: \$190; \$225 after 12/1/16 and onsite

Code/Title: (WEFTW) ACI Concrete Field Testing Technician – Grade I Written Examination

Date/Time: Wednesday, January 18 | 3:30 pm – 5:00 pm

Location: LVCC North Hall

The one-hour, closed-book, written exam consisting of 55 multiple-choice and true-false questions is scheduled for Wednesday from 3:30 p.m. – 5:00 p.m. The exam is based on the ACI publication CP-1 (16) – (included when you register for performance exam THFTP). To certify as an ACI Concrete Field Testing Technician Grade I, candidates must pass both the written exam (WEFTW) and the performance exam (THFTP). **Separate registration and fees required for both exams and review seminar.**

IMPORTANT: The official workbook for the ACI Concrete Field Testing Technician Grade I certification, CP-1 (16) is only included when registering for the performance exam (THFTP).

WEFTW Written Exam Fee: \$205

Code/Title: (THFTP) ACI Concrete Field Testing Technician – Grade I Performance Examination

Date/Time: Thursday, January 19 | 9:00 am – 1:00 pm (select preferred two-hour time slot)

Location: LVCC Gold Lot, Certification/Training Area

The hands-on performance exam requires examinee to properly perform and record the results of seven basic field tests on freshly mixed concrete. Attendees will have the opportunity to participate in a hands-on practice session Wednesday from 8:00 am. – 12:00 pm. **Practice session and workbook, CP-1(16), are included with performance examination registration.** The workbook will be mailed to you prior to the show. EXCEPTION: Examinees from outside the United States will receive their study guide the first day of the review seminar. To certify as a Concrete Field Testing Technician - Grade I, candidates must pass both the written exam (WEFTW) and the performance exam (THFTP). **Separate registration and fees required for both exams and review seminar.**

CANCELLATION POLICY: If certification candidate cancels registration for the performance exam THFTP there will be a **\$75 non-refundable fee** to cover cost of the workbook. To send a replacement to take the exams contact registration@worldofconcrete.com.

NOTE: Space is limited to 30 participants per time slot, so register early!

When registering, attendees will select their preferred two-hour slot – see schedule below:

THFTP1: 9:00 am – 11:00 am

THFTP2: 11:00 am – 1:00 pm

THFTP Performance Exam Fee: \$360

SCHEDULE of EVENTS for the Field Testing Certification:

- Preparatory 4-hour review seminar TU405 scheduled on Tuesday, 1:00 pm – 5:00 pm.
- Hands-on practice session Wednesday between 8:00 am and 12:00 pm is an open workshop which gives attendees an opportunity to observe and participate in demonstrations for each of the testing procedures. You must be registered for the performance exam in order to attend this practice session.
- Written Examination WEFTW administered Wednesday from 3:30 pm – 5:00 pm.
- Performance Examination THFTP takes approximately two hours to complete and will be held Thursday from 9:00 am through 1:00 pm. When registering, candidates will need to select their preferred time slot.

NOTE: Separate registrations required for 4-hour review TU405 (\$190; \$225 after 12/1/16), written exam WEFTW (\$205) and performance exam THFTP (\$360).

Questions about the certification or examinations can be answered
by Las Vegas Chapter ACI at acilasvegas@earthlink.net or 702.656.8827.

ACI Concrete Flatwork Finisher/Technician Certification

Presented by the American Society of Concrete Contractors.



Code/Title: (WE407) ACI Concrete Flatwork Finisher/Technician Review

Date/Time: Wednesday, January 18 | 8:00 am - 12:00 pm

Trainers: Jerry Holland, Bob Simonelli

For participants taking the ACI Concrete Flatwork Finisher certification exam, this educational/review course will cover topics such as quality control tests, tools, placing, finishing, jointing, and curing. The ACI CP-10(10) workbook is included at no additional charge (Spanish version available upon request).

1. Recognize basic materials and mix proportioning
2. Understand procedures for placing, consolidating, finishing, edging, jointing, curing and protecting concrete flatwork
3. Identify techniques for the proper use of tools
4. Clarify certification process, requirements, and preparation needed for the written exam

4.0 continuing education hours approved for AIA/CES (HSW), PDH, and TCA.

WE406 Seminar Fee: \$190; \$225 after 12/1/16 and onsite

Code/Title: (THCFF) ACI Concrete Flatwork Finisher/Technician Written Examination

Date/Time: Thursday, January 19 | 1:00 pm - 3:00 pm

Location: LVCC North Hall

The closed-book, two-hour written exam consisting of 50 multiple-choice questions based on the ACI CP-10(10) workbook is scheduled for Thursday afternoon, 1:00 pm – 3:00 pm (Spanish version of exam available upon request). Participants who score 70% or above will be certified as an ACI Flatwork Technician. Credential can be upgraded to ACI Flatwork Finisher/Technician upon submission and verification of required work experience. This written exam will satisfy flatwork finisher recertification needs.

THCFF Written Exam Fee: \$250

NOTE: Separate registrations required for 4-hour review seminar WE407 (\$190; \$225 after 12/1/16) and written examination THCFF (\$250).

*Questions about this certification program can be answered by
American Society of Concrete Contractors at 866-788-2722.*

ACI Specialty Commercial/Industrial Concrete Flatwork Finisher/Technician Certification

Presented by the American Society of Concrete Contractors.

Code/Title: (MO403) ACI Specialty Commercial/Industrial Concrete Flatwork Review

Date/Time: Monday, January 16 | 1:00 pm - 5:00 pm

Trainers: Jerry Holland, Bob Simonelli



This is the classroom educational/review session for the ACI Specialty Commercial/Industrial Concrete Flatwork Finisher/Technician certification exam. This program is for certified ACI Concrete Flatwork Finishers that have experience in commercial/industrial flatwork with demonstrated competency in using a ride-on power trowel and highway straightedge (bump cutter). This session will cover commercial/industrial slab construction and techniques for high tolerance floors. The ACI CP11 (08) workbook is included at no additional charge.

1. Understand the skills needed to become a certified Commercial/Industrial Flatwork Finisher
2. Review slab construction technology
3. Recognize techniques for high tolerance floors, surface hardeners, and silica fume concrete
4. Review the certification process, requirements, and preparation needed for the examinations

Separate registration and fees required for review seminar (MO403), performance exam (TUFPE) and written exam (TUCIF). Workbooks & exams are not available in Spanish for this certification.

4.0 continuing education hours approved for AIA/CES (HSW), PDH, and TCA.

MO403 Seminar Fee: \$190; \$225 after 12/1/16 and onsite

Code/Title: (TUFPE) ACI Specialty Concrete Flatwork Hands-On Performance Examination

Date/Time: Tuesday, January 17 | 7:00 am - 1:00 pm

Location: LVCC Gold Lot, Certification/Training Area

Attendees are required to be an ACI Certified Flatwork Finisher with experience and competency in using a ride-on power trowel and highway straightedge (bump cutter) in order to participate in this examination.

Attendees will be evaluated on their ability to place, strike-off, and finish a high tolerance superflat slab. ACI Certified Concrete Flatwork Finishers that successfully complete the written exam, performance exam and verification of work experience, will be issued certification as an ACI Specialty Commercial/Industrial Concrete Flatwork Finisher. Successful participants will also receive the High Tolerance Specialist certification.

Since the performance exam will be conducted using fresh concrete, a limited number of hands-on performance examinations will be available. Registered participants must be present for the entire performance examination.

Separate registration and fees required for both performance exam (TUFPE) & written exam (TUCIF) and the review seminar (MO403).

IMPORTANT: ASCC will provide all powered and hand tools needed for the performance exam plus safety equipment—it is recommended that participants wear steel toe boots.

NOTE: Space for performance exam is limited to 50 participants, so register early!

TUFPE Performance Exam Fee: \$325

Code/Title: (TUCIF) ACI Specialty Concrete Flatwork Written Examination

Date/Time: Tuesday, January 17 | 3:30 pm - 5:30 pm

Location: LVCC North Hall

The closed-book, two-hour written exam consisting of 75 multiple-choice questions based on the ACI CP11(08) workbook is scheduled for Tuesday afternoon, 3:30 pm – 5:30 pm. Participants who score 70% or above will be certified as an ACI Specialty Commercial/Industrial Concrete Flatwork **Technician**. Participants can upgrade to full Specialty Commercial/Industrial Concrete Flatwork **Finisher/Technician** status upon meeting the requirement of certification as an ACI Concrete Flatwork Finisher, submittal and approval of sufficient work experience, and successful completion of the ACI Specialty Commercial/Industrial Concrete Flatwork performance examination. This written exam will satisfy specialty flatwork finisher recertification needs. **Separate registration and fees required for both written exam (TUCIF) & performance exam (TUFPE) and the review seminar (MO403).**

TUCIF Written Exam Fee: \$250

SCHEDULE of EVENTS for the Specialty Commercial/Industrial Certification:

- Preparatory 4-hour review seminar **MO403** scheduled on Monday, 1:00 pm – 5:00 pm.
- Performance Examination **TUFPE** takes approximately six hours to complete and will be held Tuesday, 7:00 am – 1:00 pm in the Gold Lot, outside LVCC North Hall.
- Written Examination **TUCIF** administered Tuesday afternoon, 3:30 pm – 5:30 pm.

NOTE: Separate registrations required for 4-hour review MO403 (\$190; \$225 after 12/1/16), performance exam TUFPE (\$325 fee) and written exam TUCIF (\$250 fee).

Questions about this certification program can be answered by
American Society of Concrete Contractors at 866-788-2722.

ACI/CFA Residential Foundation Technician Certification

Presented by the Concrete Foundations Association.



Code/Title: (TH408) CFA Residential Foundation Technician Review
Date/Time: Thursday, January 19 | 8:00 am - 12:00 pm
Trainers: Ed Sauter, Jim Baty

Residential concrete construction has a broad range of experience and quality represented in thousands of companies across North America. Distinguishing your company from these ranks is one of the most important decisions you can make. The ACI/CFA Foundation Technician Certification Program was established to provide measurable quality assurance and demonstrate command of essential standards to the residential construction industry. This presentation highlights the resources and standards used during the exam with a focus on their practical use. Attendees will identify the advanced principles that define companies from coast to coast for their quality and leadership while they prepare to be recognized as a **Certified Foundation Technician**.

1. Assess the basic concepts specific to residential foundations necessary for ACI/CFA Technician Certification
2. Determine the minimum design requirements for concrete foundation wall designs
3. Evaluate various techniques for excavating and backfilling
4. Identify safety issues and code compliance

NOTE: “Seminar Only” attendees will only receive a handout containing the presented slides. Individuals not registered for and sitting for the written exam are encouraged to purchase the exam reference packet for additional reference during the seminar, for preparation to a future exam, or in business practice. The exam reference packet can be obtained through www.cfawalls.org

4.0 continuing education hours approved for AIA/CES (HSW) and PDH.

TH408 Seminar Fee: \$190; \$225 after 12/1/16 and onsite

Code/Title: (THCFA) ACI/CFA Residential Foundation Technician Written Examination

Date/Time: Thursday, January 19 | 3:00 pm – 5:30 pm
Location: LVCC North Hall

The ACI/CFA Residential Foundation Technician Certification is achieved with a 2.5-hour exam consisting of 80 multiple-choice questions. The exam is scheduled for Thursday afternoon, 3:00 pm – 5:30 pm. This open-book but difficult test challenges the examinee to demonstrate a working knowledge of the current codes and standards influencing the residential foundation industry. After successful completion of this exam, participants will earn the **ACI/CFA Residential Foundation Technician Certification**.

Registration for this exam includes the required exam reference packet containing all of the documents used during the exam. Study packet includes copies of ACI residential documents, a portion of the IRC, and other important industry resources. Packets will be shipped to registrants following registration confirmation.

DEADLINE TO REGISTER: Based on the delivery of required exam materials, **December 29 is the last day to register for the written examination** – interested registrants can contact jbaty@cfawalls.org for late registration approval and expedited shipping rates.

CANCELLATION POLICY: There is a **\$160 non-refundable fee** (cost of the reference packet) if cancelling the written exam registration. To send a replacement to take the exam contact registration@worldofconcrete.com.

THCFA Written Exam Fee: \$365

Additional Residential Seminars: The below 90-minute seminars have valuable information for the residential construction contractor and provide further detail to those preparing to sit for the ACI/CFA Foundation Technician Certification written examination.

Code/Title: (MO131) Residential Subgrade and On-Grade Drainage: Problems & Solutions
Date/Time: Monday, January 16 | 8:30 am - 10:00 am

Code/Title: (TU132) Residential & Light Commercial Construction for Poured Concrete, ICF & Masonry Walls
Date/Time: Tuesday, January 17 | 8:30 am - 10:00 am

Code/Title: (WE134) Residential Guidelines to Freeze/Thaw Durable Concrete
Date/Time: Wednesday, January 18 | 1:30 pm - 3:00 pm

The exam is independent of the 4-hour review seminar TH408 (\$190; \$225 after 12/1/16). Individuals registered for the written exam, THCFA (\$365), may wish to add the seminar for best preparation. Optional 90-minute seminars are priced individually at \$105; \$135 after 12/1/16.

For questions or additional information, please contact CFA at 319.895.6940.

ACI/TCA Tilt-Up Technician/Supervisor Certification

Presented by the Tilt-Up Concrete Association.



Code/Title: (TH409) TCA Tilt-Up Technician/Supervisor Review

Date/Time: Thursday, January 19 | 12:00 pm - 4:00 pm

Location: LVCC North Hall

This seminar presents an overview of the areas of construction in which a tilt-up supervisor is expected to be knowledgeable: safety, plan reading, scheduling, site preparations, foundations, slabs-on-grade, layout, forming, concrete placement and properties, erection and structural systems. These areas of knowledge comprise the essential basis for achieving a status as a Certified Tilt-Up Technician or Supervisor. Work experience, length of certification, certification levels and other program criteria will be discussed.

1. Describe the ACI Tilt-Up Technician/Supervisor certification process, responsibilities and terminology
2. Summarize issues of safety, plan reading, site preparation, scheduling, foundations, slabs-on-grade, layout, forming, placement, and erection of tilt-up walls
3. Recognize the factors that affect the performance of concrete for tilt-up panels including aggregates, colored and special cement, admixtures, and mix proportioning
4. Demonstrate knowledge of basic concrete technology by completing study questions

NOTE: “Seminar Only” attendees will only be given a handout of presentation slides. Attendees who register for the written exam will automatically receive a copy of the CP-50 (07) reference guide for exam preparation. Individuals not registered and sitting for the exam are encouraged to contact TCA, visit www.tilt-up.org, or www.concrete.org to purchase a copy of this resource as a supplement for the seminar or for future exam preparation.

4.0 continuing education hours approved for AIA/CES (HSW), PDH, and TCA.

TH409 Seminar Fee: \$190; \$225 after 12/1/16 and onsite

Code/Title: (THTUS) ACI/TCA Tilt-Up Technician/Supervisor Certification Written Examination

Date/Time: Thursday, January 19 | 4:00 pm - 6:00 pm

Location: LVCC North Hall

The closed-book, two-hour written exam consisting of 80 multiple-choice questions based on ACI publication CP50 (07) is scheduled on Thursday from 4:00 pm to 6:00 pm, immediately following the seminar. Participants who score 70% or above will be certified as an **ACI/TCA Tilt-Up Technician**. A work experience submittal is required for individuals to be upgraded to **ACI/TCA Tilt-Up Supervisor**. Work experience forms will be made available at the examination or can be obtained directly from ACI at www.concrete.org/certification.

Attendees who register for the exam will automatically receive ACI Publication CP50 (07), the Tilt-Up Technician/Supervisor workbook. Manuals will be shipped to registrants beginning in November on a weekly basis (attendees can request expedited shipping). Spanish versions of the exam and manual are available upon request.

DEADLINE TO REGISTER: December 29 is the last day to register for the written examination – interested registrants can contact jbaty@tilt-up.org for late registration approval and to verify the rate for expedited shipping. If you register after December 29, manuals will be available for pick-up onsite beginning Tuesday, Jan 17 at the ACI or TCA booth or registrant can arrange for express shipping by contacting the TCA.

CANCELLATION POLICY: There is a **\$115 non-refundable fee** if cancelling the written exam registration. To send a replacement to take the exam contact registration@worldofconcrete.com.

THTUS Written Exam Fee: \$355

Separate registrations required for 4-hour review TH409 (\$190; \$225 after 12/1/16) and written exam THTUS (\$355).

* - Domestic U.S. and Canada rate included. Off-shore and all international must contact TCA for additional shipping charges and options.

Questions about the certification and/or examination can be answered by the ACI Certification Department at 248.848.3790 or TCA at 319.895.6911.

ACPA Concrete Pump Operator Certification

Presented by the American Concrete Pumping Association.



Code/Title: (TU404) ACPA Concrete Pump Operator Safety Review

Date/Time: Tuesday, January 17 | 8:00 am - 12:00 pm

Location: LVCC North Hall

ACPA Concrete Pump Operator Certification meets the safety training requirement included in the ASME B30.27 safety standard for material placement systems for concrete pumps and conveyors, and is the only industry-recognized certification program which provides an independent written assessment of an operator's knowledge regarding concrete pump safety. Specific equipment experience time and completion of the ACPA Safety Training Program are prerequisites for ACPA Certification.

Attending WOC Seminar TU404 on Concrete Pump Safety fulfills the safety training requirement and is a comprehensive, in-depth course covering all the basics included in the Certification Exam. Inexperienced operators can fulfill their safety training requirement and still have the opportunity to take the exam and then apply for certification once they reach the required experience time. Certification and apprentice examinations are scheduled Tuesday afternoon, 1:00 pm – 3:00 pm.

1. Evaluate how to increase an operator's level of safety awareness and professionalism
2. Summarize the concrete pumping basics from before the job preparation to cleaning out and completing the job
3. Discuss detailed instructions on specific safety hazards such as: operating near power lines; outrigger setup; cleanout procedures and air entrapment
4. Identify the top safety issues and how to safely and effectively deal with co-workers coming in contact with a concrete pump on the job

4.0 continuing education hours approved for AIA/CES (HSW), PDH, and TCA.

TU404 Seminar Fee: \$190; \$225 after 12/1/16 and onsite

Code/Title: (TUCPE) ACPA Concrete Pump Operator Safety Written Examination

Date/Time: Tuesday, January 17 | 1:00 pm - 3:00 pm

Location: LVCC North Hall

Take the ACPA Concrete Pump Operator Certification Exam the same day as the training seminar, Tuesday, 1:00 pm – 3:00 pm. Certification, re-certification and apprentice examinations will be available. Specific work experience on specified equipment is required for certification. Exam registration fee includes study guide which will be mailed to examinees prior to the show.

NOTE: ACPA Members are eligible for a \$150 exam rebate. Members and those interested in becoming a member should contact ACPA at 614.431.5618 or email janet@concretepumpers.com for rebate details.

TUCPE Written Exam Fee: \$285

Separate registrations required for 4-hour preparatory review seminar TU404 (\$190; \$225 after 12/1/16) and written exam TUCPE (\$285).

For more information regarding the certification process or member's exam rebate, contact ACPA at 614.431.5618 or email janet@concretepumpers.com.

ICRI Concrete Slab Moisture Testing Certification Program

Presented by the International Concrete Repair Institute.



BEFORE REGISTERING: All Tier 2 full certification and recertification applicants must be pre-approved and receive an Approval Code from ICRI prior to registering.

The International Concrete Repair Institute (ICRI) is pleased to provide a Concrete Slab Moisture Testing Certification Program. The purpose of the program is to help improve the performance of concrete slab moisture testing with intent of producing more consistent, accurate and reliable test results that allow flooring installers, manufacturers, design professionals and owners to make better decisions on when a concrete floor is ready for a floor covering installation.

This certification program is divided into two Tier levels:

Tier 1 WECRT is for individuals who are not regularly engaged in slab moisture testing, yet have an active interest in learning more about the tests, what the tests mean, and how the tests should be performed. Participants will be required to attend a 4-hour educational/review seminar and take a one-hour written exam. Tier 1 participants who attend the educational/review seminar and pass the written exam will be awarded a Certificate of Achievement from ICRI.

Tier 2 THRPE is for individuals who desire full certification. Participants will be required to attend an educational/review seminar, take the Tier 1 written exam, and perform each of four ASTM field tests under the supervision of a qualified judge who will not provide any level of coaching. By passing both the written and performance exams, a **Concrete Slab Moisture Testing Technician - Grade 1**, 5-year certification, will be issued by ICRI to the individual.

Written and performance exams are based on the following four (4) ASTM Standards, including all Annexes and Appendices:

1. Preparing Concrete Floors to Receive Resilient Flooring; Section 5.2 pH Testing (ASTM F 710)
2. Measuring Moisture Vapor Emission Rate of Concrete Subfloor Using Anhydrous Calcium Chloride (ASTM F 1869)
3. Determining Relative Humidity in Concrete Floor Slabs Using *in situ* Probes (ASTM F2170)
4. Preliminary Evaluation of Comparative Moisture Condition of Concrete, Gypsum Cement and Other Floor Slabs and Screeds Using a Non-Destructive Electronic Moisture Meter (ASTM F2659)

Code/Title: (WE406) ICRI Concrete Slab Moisture Testing Educational/Review

Date/Time: Wednesday, January 18 | 8:00 am - 12:00 pm

Trainers: Scott Tarr

This four-hour seminar is open to anyone. The seminar is mandatory at both the Tier 1 and 2 levels. The seminar will be conducted by industry experts who have extensive experience with moisture related slab issues and are at the forefront of development and performance of the ASTM moisture test methods.

NOTE: Those that register for only the educational/ review seminar will not receive complete course materials/ASTM's.

4.0 continuing education hours approved for AIA/CES (HSW) and PDH.

WE406 Seminar Fee: \$190; \$225 after 12/1/16 and onsite

Code/Title: (WECRT) ICRI Concrete Slab Moisture Testing Tier 1 Program

Date/Time: Wednesday, January 18 / Seminar 8:00 am – 12:00 pm & Exam 2:00 pm – 3:00 pm

Trainers: Peter Craig, Scott Tarr

A closed-book, 60-minute written exam, based on the ASTM tests listed above, along with general knowledge of The Tier 1 program includes a four-hour educational/review seminar, scheduled on Wednesday from 8:00am – 12:00pm, and a closed-book, 60-minute written exam, based on the ASTM tests listed above, along with general knowledge of moisture testing in concrete slabs, scheduled on Wednesday from 2:00 pm – 3:00 pm. Attendees taking the Tier 1 Program will receive complete course materials, including copies of the four ASTM's listed above.

Tier 1 participants who attend the educational/ review seminar and pass the written exam will be issued a Certificate of Achievement from ICRI. **Examinees must attend the educational/review seminar before sitting for the written exam (registration for WE406 included with WECRT registration).**

WECRT Tier 1 Fee: \$460; \$520 after 12/1/16 and onsite

Code/Title: (THRPE) ICRI Concrete Slab Moisture Testing Tier 2 Program*

Date/Time: Wednesday, January 18 / Seminar 8:00 am – 12:00 pm & Exam 2:00 pm – 3:00 pm

Thursday, January 19 | 12:00 pm - 5:00 pm (select preferred one-hour time slot)

Trainers: Peter Craig, Scott Tarr

***All Tier 2 examinees must be pre-approved and receive an Approval Code from ICRI prior to registering.** Pre-approval is waived if examinees register for and attend the optional Concrete Slab Moisture Demonstration & Workshop (ICRITH), scheduled for Thursday from 8:00am – 11:00am (separate fee required).

The Tier 2 program includes a four-hour educational/review seminar, scheduled on Wednesday from 8:00am – 12:00pm, a closed-book, 60-minute written exam, based on the ASTM tests listed above, along with general knowledge of moisture testing in concrete slabs, scheduled on Wednesday from 2:00 pm – 3:00 pm, and a 1-hour performance exam on Thursday from 12:00pm – 5:00pm. Attendees taking the Tier 2 Program will receive complete course materials, including copies of the four ASTM's listed above.

Designed to evaluate the individual's ability to execute proper concrete slab moisture testing procedures, a limited number of hands-on field performance examinations (*1 hour allowed per examinee*) will be available onsite at WOC on Thursday beginning at 12 pm. Examinees will perform the four ASTM test methods listed above on hardened concrete/masonry (there will be no exposure to fresh concrete) under the supervision of a qualified judge who will not provide any level of coaching. ICRI will provide all necessary power tools and safety equipment. No heavy lifting is involved with these tests.

Space is limited to 3 participants per time slot, so register early! One-hour time slots for the Performance Exam will be confirmed at the written exam. Special requests for time slots will be considered by contacting ICRI prior to registering but are not guaranteed unless approved by ICRI.

Select preferred one-hour Performance Exam time slot from schedule below:

THRPE1: 12 pm – 1 pm

THRPE4: 3 pm – 4 pm

THRPE2: 1 pm – 2 pm

THRPE5: 4 pm – 5 pm

THRPE3: 2 pm – 3 pm

NOTE: Prequalification for acceptance into **Tier 2 full certification (THRPE)** will be adequate previous hands-on concrete slab moisture testing experience that **must be pre-approved and an Approval Code received from ICRI prior to registering.** The requirement for pre-approved previous hands-on testing experience will be waived if the applicant registers for and attends the optional ICRI Demonstration & Workshop (ICRITH) – separate registration and fee required. By attending the Educational/Review Seminar and passing both the written and performance exams, a **Concrete Slab Moisture Testing Technician - Grade 1** certification will be issued to the individual by ICRI for a period of five (5) years. Certified individuals will receive a certificate and wallet certification card, and be eligible to be listed on the ICRI website database. **Examinees must attend the educational/review seminar and take the written exam before taking the performance exam (registration for WE406 & WECRT is included with THRPE package).**

THRPE Tier 2 Fee: \$825; \$915 after 12/1/16 and onsite

Code/Title: (ICRITH) ICRI Concrete Slab Moisture Demonstration & Workshop

Date/Time: Thursday, January 19 | 8:00 am – 11:00 am

Trainer: Peter Craig

Individuals who want to register for the Tier 2 Program (THRPE) without pre-approved previous hands-on concrete slab moisture testing experience, or individuals who wish to enhance their slab moisture testing ability, may take the *optional* Concrete Slab Moisture Testing Demonstration & Workshop. Four ASTM tests will be demonstrated with opportunity for hands-on testing and training by ICRI instructors or judges. Participation in this session will fulfill the requirement of pre-approved previous hands-on slab moisture testing experience necessary for acceptance into the full certification performance exam (THRPE).

ICRITH Demo/Wkshp Fee: \$195; \$225 after 12/1/16 and onsite

Code/Title: (WERCE) ICRI Concrete Slab Moisture Testing Recertification Examination*

Date/Time: Wednesday, January 18 | 2:00 pm – 3:00 pm

Location: LVCC North Hall

***Candidates must be pre-approved by ICRI and receive an Approval Code prior to registering.**

This exam is available for ICRI certified individuals whose five-year certification has or is about to expire. Recertification examinees will take a closed-book, 60-minute written exam based on the ASTM's listed above, along with general knowledge of moisture testing in concrete slabs. Examinees will be shipped study/review materials, including ASTM's, at least two weeks prior to WOC, if approved by ICRI and registered at least three weeks prior to the exam date.

Although not required, recertification participants may want to attend the Educational/Review Session (WE406) in preparation for the recertification exam. Separate registration and additional fee required for this seminar.

By passing the recertification exam, a **Concrete Slab Moisture Testing Technician – Grade 1**, five-year certification will be issued by ICRI to the individual. Recertified individuals will receive a new certificate and wallet certification card, and be eligible to be listed on the ICRI website database.

NOTE: *Participants that get approved and register after December 28th will need to make arrangements for obtaining study/review materials directly with ICRI.*

WERCE Recertification Exam Fee: \$425; \$485 after 12/1/16 and onsite

Schedule of events for the ICRI Concrete Slab Moisture Testing Certification Program:

- Wednesday, 8 am – 12 pm, 4-hour Educational/Review Seminar Only
 - **Seminar WE406 \$190; \$225** after 12/1/16 and onsite
- Wednesday, 2:00 pm – 3:00 pm, Recertification Examination
 - **Recertification Exam WERCE \$425; \$485** after 12/1/16 and onsite
 - **Requires ICRI pre-approval and Approval Code**
- Wednesday, 8 am – 12 pm, Review Seminar; plus 2:00 pm – 3:00 pm, Written Exam
 - **Tier 1 Program WECRT \$435; \$495** after 12/1/16 and onsite
- Wednesday, 8 am – 12 pm, Seminar; 2:00 pm – 3:00 pm, Written Exam; plus Thursday, 12 pm – 5 pm, Performance Exam (*select preferred 1-hour time slot*)
 - **Tier 2 Program THRPE \$820; \$895** after 12/1/16 and onsite
 - **Requires ICRI pre-approval and Approval Code**
- Thursday, 8 am – 11 am, Demonstration & Workshop (*optional*)
 - **Demo/Workshop ICRITH \$195; \$225** after 12/1/16 and onsite

*For questions and to receive approval of previous hands-on testing experience for the Tier 2 Performance Exam (THRPE); obtain approval of a special request for a performance exam time slot; get approval for retesting & recertification; and receive Approval Code, please contact Ken Lozen, ICRI Technical Director, **prior to registering** at 248.358.6996 or via email kenl@icri.org.*