

NOTE: Separate registrations and fees required for ALL review seminars, demonstrations and written exams.

ACI Adhesive Anchor Installation Inspector Certification

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



Code/Title: (MO401) ACI Adhesive Anchor Installation Inspector Review
Date/Time: Monday, January 21 | 8:00 am - 12:00 pm
Trainer: Werner Hellmer
Location: LVCC North Hall

ACI Adhesive Anchor Installation Inspector workbook package CP-81 (a \$173 value), is included with the written exam registration and will be mailed to candidates prior to the show. EXCEPTION: Examinees from outside the United States will receive their study guide at the review seminar.

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 certified. Many inspectors have gone through the current ACI Adhesive Anchor Installer (AAI) program in an effort to further develop their knowledge on proper installation of adhesive anchors. Since the ACI 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 Installation INSPECTOR, candidates are required to:

- Attend ACI Adhesive Anchor Installation Inspector review seminar MO401, Mon, 8am – 12pm
- Attend ACI Adhesive Anchor installation demonstration session MOAAID, Mon, 1pm – 4pm
- Pass the written exam TUAIW, Tues, 8am – 12pm

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 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

NOTE: “Seminar Only” attendees not registered for the written exam should contact ACI Las Vegas at acilasvegas@outlook.com to purchase a copy of workbook CP-81.

4.0 continuing education hours approved for AIA/CES LU|HSW, PDH and TCA.

MO401 Seminar Fee: \$200; \$235 after 12/3/18

Code/Title: (TUAIW) ACI Adhesive Anchor Installation Inspector Written Examination
Date/Time: Tuesday, January 22 | 8:00 am – 10:30 am
Location: LVCC North Hall

The 2-hour written exam, combination open/closed book exam is scheduled for Tuesday, from 8:00 a.m. – 10:30 a.m. The installer portion of the exam is closed book and consists of approximately 45 multiple-choice questions based on the ACI Adhesive Anchor Installation workbook, CP-81. The inspector portion of the written exam is open book and consists of approximately 55 multiple-choice questions based on the Inspector reference package.

*****See MO401 description for requirements to certify as an ACI Adhesive Anchor Installation INSPECTOR.**

CANCELLATION POLICY: If the certification candidate cancels registration for the written exam, there will be a **\$150 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: \$385

CONTACT INFORMATION: Questions about the inspector certification or examination can be answered by Las Vegas Chapter ACI at acilasvegas@outlook.com or 702.656.8827.

ACI Advanced/Specialty Commercial/Industrial Concrete Flatwork Finisher/Technician Certification



Presented by the Las Vegas Chapter of the American Concrete Institute

Code/Title: (MO403) ACI Advanced/Specialty Commercial/Industrial Concrete Flatwork Review
Date/Time: Monday, January 21 | 1:00 pm - 5:00 pm
Trainers: Jerry Holland, Bob Simonelli
Location: LVCC North Hall

The official workbook for the ACI Advanced/Specialty Commercial/Industrial Finisher certification ACI CP-11(08) is included when registering for the written exam TUCIE. Contact Las Vegas Chapter ACI for information on receiving the official workbook.

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 CP-11 (08) workbook is included at no additional charge.

Learning Objectives:

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

NOTE: 'Seminar Only' attendees not registered for the written exam will receive handout containing presentation slides only. To purchase copy of workbook CP-11(08), contact ACI Las Vegas at acilasvegas@outlook.com. 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: \$200; \$235 after 12/3/18 and onsite

Code/Title: (TUFPE) ACI Specialty Concrete Flatwork Hands-On Performance Examination
Date/Time: Tuesday, January 22 | 7:00 am - 1:00 pm
Location: LVCC Bronze 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.

IMPORTANT: ACI Las Vegas 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 22 | 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.

TUCIF Written Exam Fee: \$300

SCHEDULE of EVENTS for the Specialty Commercial/Industrial Certification:

Preparatory 4-hour review seminar **MO403** scheduled on Mon, 1pm – 5pm

Performance Examination **TUFPE** takes approximately six hours to complete and will be held Tues, 7am – 1pm in the Bronze Lot, outside of South Hall

Written Examination **TUCIF** administered Tues, 3:30pm – 5:30pm

CONTACT INFORMATION: Questions about the technician certification or examination can be answered by Las Vegas Chapter ACI at acilasvegas@outlook.com 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 22 | 1:00 pm - 5:00pm
Trainer: Mitch Englestead
Location: LVCC North Hall



The official workbook for the ACI Concrete Field Testing Technician Grade I certification, CP-1 36th Edition is included when registering for the performance examination THFTP. The workbook will be mailed to candidates prior to the show. EXCEPTION: Examinees from outside the United States will receive their study guide at the review seminar.

This 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.

NOTE: “Seminar Only” attendees should contact ACI Las Vegas to obtain a copy of the workbook CP-1 36th Edition by contacting Las Vegas Chapter ACI at acilasvegas@outlook.com.

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) 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 LU|HSW, PDH and TCA.

TU405 Seminar Fee: \$200; \$235 after 12/3/18

Code/Title: (WEFTW) **ACI Concrete Field Testing Technician – Grade I Written Examination**
Date/Time: Wednesday, January 23 | 3:30 pm – 5:00pm
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 pm – 5:00 pm. The exam is based on the ACI publication CP-1 36th Edition – (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.

WEFTW Written Exam Fee: \$210

Code/Title: (THFTP) **ACI Concrete Field Testing Technician – Grade I Performance Examination**
Date/Time: Thursday, January 24 | 9:00 am – 1:00 pm (*select preferred two-hour time slot*)
Location: LVCC Bronze 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. To certify as a Concrete Field Testing Technician - Grade I, candidates must pass both written exam WEFTW and performance exam THFTP.

CANCELLATION POLICY: If certification candidate cancels registration for the performance exam THFTP there will be a **\$100 non-refundable fee** to cover cost of the workbook. To send a replacement to take the exam contact registration@worldofconcrete.com.

NOTE: Space is limited to 15 participants per time slot, so register early!

When registering, select preferred two-hour slot from schedule below:

THFTP1: 8 am – 10 am THFTP3: 11 am – 1 pm
THFTP2: 9 am – 11 am THFTP4: 12 pm – 1 pm

THFTP Performance Exam Fee: \$360

SCHEDULE of EVENTS for the Concrete Field Testing Grade 1:

- Preparatory 4-hour review seminar **TU404:** Tues, 1pm – 5pm
- Written Exam **WEFTW:** Wed, 3:30pm – 5:30pm
- Hands-on practice session: Wed, between 8am and 12pm; open workshop where attendees can observe and participate in demonstrations for each of the testing procedures
- Performance Examination **THFTP:** Thurs, 9am - 1pm; takes approximately two hours to complete. When registering, candidates will need to select their preferred time slot.

NOTE: You must be registered for the performance exam to attend the practice session.

CONTACT INFORMATION: Questions about the field testing certification or examinations can be answered by Las Vegas Chapter ACI at acilasvegas@outlook.com or 702.656.8827.

ACI Concrete Flatwork Finisher/Technician Certification

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

Code/Title: (WE407) **ACI Concrete Flatwork Finisher/Technician Review**
Date/Time: Wednesday, January 23 | 8:00 am - 12:00 pm
Trainers: Jerry Holland, Bob Simonelli
Location: LVCC North Hall



The official workbook for the ACI Concrete Flatwork Finisher/Technician certification ACI CP-10(10) is included when registering for the written exam THCFE. Spanish version of the workbook and exam are available upon request — see contact information below.

For participants taking the ACI Concrete Flatwork Finisher certification exam, this review course will cover topics such as quality control tests, tools, placing, finishing, jointing and curing.

Learning Objectives:

1. Recognize basic materials and mix proportioning
2. Analyze 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

NOTE: ‘Seminar Only’ attendees not registered for the written exam will receive handout containing presentation slides only and should contact Las Vegas Chapter ACI at acilasvegas@outlook.com to receive a book to serve as a supplemental handout for this seminar.

4.0 continuing education hours approved for AIA/CES LU|HSW, PDH and TCA.

WE407 Seminar Fee: \$200; \$235 after 12/3/18

Code/Title: (THCFF) ACI Concrete Flatwork Finisher/Technician Written Examination
Date/Time: Thursday, January 24 | 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 Thursday, 1:00 pm – 3:00 pm. Written examination registration fee includes the ACI CP-10(10) workbook (valued at \$81). Examinees will receive workbook at the ACI Concrete Flatwork Finisher/Technician review seminar WE407. Spanish version of the workbook and exam available upon request – see *contact information below*.

Participants who score 70% or above will be certified as an ACI Flatwork Technician. Credential can be upgraded to full ACI Flatwork Finisher status upon submittal and approval of required work experience or successful completion of the ACI performance evaluation. This written exam will satisfy flatwork finisher recertification needs.

THCFF Written Exam Fee: \$340

CONTACT INFORMATION: Questions about the flatwork certification and/or request for Spanish version should be directed to the ACI Las Vegas Chapter at acilasvegas@outlook.com or 702.656.8827.

ACI/CFA Residential Foundation Technician Certification

Presented by the Concrete Foundations Association.

Code/Title: (TH408) CFA Residential Foundation Technician Review
Date/Time: Thursday, January 24 | 8:00 am - 12:00 pm
Trainers: Jim Baty
Location: LVCC North Hall



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. Continental US shipping only. For shipping outside the Continental US, please contact jbaty@cfwalls.org.

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**.

Learning Objectives:

1. Assess basic concepts specific to residential foundations necessary for ACI/CFA Technician Certification
2. Determine 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 receive a handout containing presentation slides only. Individuals not registered 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 for business practice – **contact CFA to purchase a copy.** Attendees who register for the written exam will automatically receive a copy of the exam reference packet.

4.0 continuing education hours approved for AIA/CES LU|HSW and PDH.

TH408 Seminar Fee: \$200; \$235 after 12/3/18

Code/Title: (THCFA) [ACI/CFA Residential Foundation Technician Written Examination](#)
Date/Time: Thursday, January 24 | 1:00 pm – 3:30 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, 1:00 pm – 3:30 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**.

DEADLINE TO REGISTER: Based on the delivery of required exam materials, **January 4 is the last day to register for the written examination** – interested registrants can contact jbatty@cfawalls.org for late registration approval and expedited shipping rates.

CANCELLATION POLICY: There is a **\$230 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: \$440.

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: (MO01) Concrete Basics I: Concrete Materials, Mixtures, Batching & Transporting
Code/Title: (MO02) Concrete Basics II: Depositing, Testing, Placing, Finishing & Curing Concrete
Code/Title: (WE04) Design and Control of Concrete Mixtures: Applications, Methods & Materials
Code/Title: (TU118) Cold Weather: Managing Concrete in Winter Conditions
Code/Title: (WE139) Completing Residential Foundation Systems for Ensuring Performance
Code/Title: (WE140) Keys to Planning Contracts for Better Residential Concrete—Managing Expectations
Code/Title: (TH141) Constructing & Marketing Concrete Houses in the Millennium

CONTACT INFORMATION: 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 24 | 12:00 pm - 4:00 pm
Trainer: Shawn Hickey
Location: LVCC North Hall



Attendees who register for the exam will automatically receive TCA Construction of Tilt-Up manual, the official publication for the Tilt-Up Technician/Supervisor certification, which is published in side-by-side English/Spanish content.

Manuals will be shipped to registrants beginning in November on a weekly basis (attendees can request expedited shipping). A Spanish version of the exam can be reserved upon request. See contact information below.

If registering after January 4, manuals will be available for pick-up onsite beginning Tuesday, Jan 22 at the ACI or TCA booth or registrant can arrange for express shipping by contacting TCA.

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 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 factors that affect 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 receive a handout containing presentation slides only. Individuals not registered for the written exam are encouraged to purchase *TCA Construction of Tilt-Up* manual for additional reference during the seminar, for preparation to a future exam or for business practice – **contact TCA to purchase a copy.**

4.0 continuing education hours approved for AIA/CES LU|HSW, PDH and TCA.

TH409 Seminar Fee: \$200; \$235 after 12/3/18

Code/Title: (THTUS) ACI/TCA Tilt-Up Technician/Supervisor Written Examination
Date/Time: Thursday, January 24 | 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 *TCA Construction of Tilt-Up* manual is scheduled Thursday, 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.

DEADLINE TO REGISTER: January 4 is the **last day to register for the written examination** – interested registrants can contact jbatty@tilt-up.org for late registration approval and to verify the rate for expedited shipping.

CANCELLATION POLICY: There is a **\$185 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: \$485

CONTACT INFORMATION: 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 22 | 8:00 am - 12:00 pm
Trainer: Les Ainsworth
Location: LVCC North Hall



Exam registration fee includes study guide which will be mailed to examinees prior to the show.

Attending seminar TU404 on Concrete Pump Safety fulfills the safety training requirement and is a comprehensive, in-depth course covering the basics included in the Certification Exam. 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.

Inexperienced operators can fulfill their safety training requirement, take the written 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.

Learning Objectives:

1. Evaluate how to increase an operator's level of safety awareness and professionalism
2. Summarize concrete pumping basics from before 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 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 LU|HSW and PDH.

TU404 Seminar Fee: \$200; \$235 after 12/3/18

Code/Title: (TUCPE) ACPA Concrete Pump Operator Safety Written Examination
Date/Time: Tuesday, January 22 | 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. Work experience on specified equipment is required for certification.

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: \$290

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

ICRI Concrete Slab Moisture Testing Certification

Presented by the International Concrete Repair Institute.



BEFORE REGISTERING: All Tier 2 full certification and recertification applicants must be pre-approved by ICRI prior to registering. CONTACT: kenl@icri.org.

Individuals who register for Tier 1 written exam WECRT will receive complete course materials including copies of the four ASTM's. Those that register for only the 4-hour review seminar will not receive course materials/ASTM's

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 [WE406/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 review seminar and take a one-hour written exam. Tier 1 participants who attend the WE406 review seminar and pass the WECRT written exam will be awarded a Certificate of Achievement from ICRI.

TIER 2 [WE406/WECRT/THRPE] is for individuals who desire **full certification**. Participants will be required to attend a 4-hour 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 attending WE406 review seminar and passing both the written exam WECRT and performance exam THRPE, 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 Review
Date/Time: Wednesday, January 23 | 8:00 am - 12:00 pm
Trainers: Peter Craig, Scott Tarr
Location: LVCC North Hall

Pre-approved examinees should register at least 3 weeks prior to the exam date to receive study/review materials, including ASTM's, at least two weeks prior to WOC; if registering after January 3rd, examinees must contact ICRI directly and make arrangements to obtain materials (kenl@icri.org).

This four-hour review seminar is open to anyone. The seminar is mandatory at both the Tier 1 and Tier 2 Certification 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.

4.0 continuing education hours approved for AIA/CES LU|HSW, PDH and TCA.

WE406 Seminar Fee: \$200; \$235 after 12/3/18

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

Date/Time: Wednesday, January 23 / 2:00 pm – 3:00 pm

Location: LVCC North Hall

A closed-book, 60-minute written exam, based on the ASTM tests listed above, along with general knowledge of moisture testing in concrete slabs, is scheduled on Wednesday from 2:00 pm – 3:00 pm. Attendees taking the Tier 1 Written Exam will receive complete course materials, including copies of the four ASTM's.

Tier 1 participants who attend the 4-hour review seminar and pass the written exam will be issued a Certificate of Achievement from ICRI. **Examinees must attend the review seminar WE406 before sitting for the written exam** (registration for review seminar requires separate registration and fee).

WECRT Tier 1 Written Exam Fee: \$285; \$315 after 12/3/18

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

Date/Time: Thursday, January 24 | 12:00 pm - 5:00 pm (select preferred one-hour time slot)

Location: LVCC North Hall

****All Tier 2 performance examinees must be pre-approved by ICRI prior to registering. CONTACT: kenl@icri.org.**

Pre-approval is waived if examinees register for and attend the *optional* Concrete Slab Moisture Demonstration & Workshop ICRITH, scheduled Thursday 8:00 am – 11:00 am (separate registration and fee required).

Tier 2 full certification applicants must attend 4-hour review seminar WE406 and take Tier 1 written exam WECRT before taking the performance exam.

Designed to evaluate an 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, Thursday beginning at 12:00 pm. Examinees will perform the four ASTM test methods on hardened concrete/masonry (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.

Attendees taking Tier 2 Performance Exam will receive complete course materials including copies of the four ASTM's.

Space is limited to 2 participants per time slot, so register early! One-hour time slots for the Performance Exam will be confirmed at Wednesday's 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

IMPORTANT: Prequalification for acceptance into **Tier 2 full certification** will be adequate previous hands-on concrete slab moisture testing experience that **must be pre-approved by ICRI prior to registering; CONTACT: kenl@icri.org.** Applicants that register for THRPE and have not received pre-approval from ICRI of previous hands-on testing experience and have not registered for the demo/workshop ICRITH, **will not be allowed to take the Tier 2 Performance Exam and will not be refunded the THRPE registration fee.**

By attending the 4-hour review seminar and passing both written and performance exams, a **Concrete Slab Moisture Testing Technician - Grade 1** certification will be issued 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.

CANCELLATION OF EXAM: A minimum of 8 registrants for Tier 2 exam THRPE must be registered by December 21st to run this program. If the minimum attendance is not met, the performance exam will be cancelled and full registration fees will be refunded.

THRPE Tier 2 Performance Exam Fee: \$440; \$490 after 12/3/18

Code/Title: (ICRITH) ICRI Concrete Slab Moisture Demonstration & Workshop**Date/Time: Thursday, January 24 | 8:00 am – 11:00 am****Trainer: Peter Craig****Location: Back of LVCC South Hall**

Individuals who want to register for the Tier 2 Performance Exam 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 waive the requirement of pre-approved previous hands-on slab moisture testing experience necessary for acceptance into the Tier 2 full certification performance exam THRPE.

ICRITH Demo/Wkshp Fee: \$200; \$250 after 12/3/18**Code/Title: (WERCE) ICRI Concrete Slab Moisture Testing Recertification Examination******Date/Time: Wednesday, January 23 | 2:00 pm – 3:00 pm****Location: LVCC North Hall******Candidates must be pre-approved by ICRI prior to registering. CONTACT: kenl@icri.org.**

IMPORTANT: Applicants that register for WERCE and have not received pre-approval from ICRI will not be allowed to take the Recertification Exam and will not be refunded the WERCE registration fee. Recertification policy states that the recertification written exam can be taken up to six (6) months prior to the certification expiration date but no longer than nine (9) months after the expiration date, or the entire full certification program (Tier 2) must be retaken in its entirety.

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 four ASTM standards along with general knowledge of moisture testing in concrete slabs.

Although not required, recertification participants may want to attend 4-hour review seminar WE406 in preparation for the recertification exam.

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.

WERCE Recertification Exam Fee: \$450; \$500 after 12/3/18**SCHEDULE OF EVENTS required for the ICRI Concrete Slab Moisture Testing Certification Program:**

- 4-hour Review Seminar **WE405**: Wednesday, 8 am – 12 pm (**\$200; \$235** after 12/3/18)
- Written Exams: Wednesday, 2:00 pm – 3:00 pm
 - Tier 1 Written Exam **WECRT**: **\$285; \$315** after 12/3/18
 - Recertification Exam **WERCE**: **\$450; \$500** after 12/3/18 **Requires ICRI pre-approval**
- Tier 2 Performance Exam **THRPE**: Thursday, 12 pm – 5 pm (**\$440; \$490** after 12/3/18) **Select 1-hour time slot; Requires ICRI pre-approval**
- Optional Demonstration & Workshop **ICRITH**: Thursday, 8 am – 11 am (**\$200; \$250** after 12/3/18)

CONTACT INFORMATION: For questions and to receive pre-approval of previous hands-on testing experience for Tier 2 Performance Exam THRPE; obtain approval of special request for performance exam time slot; and/or recertification pre-approval, please contact Ken Lozen, ICRI Technical Director, prior to registering, at 248.358.6996 or via email kenl@icri.org.

Pervious Concrete Installer Certification*Presented by the Tennessee Concrete Association.***Code/Title: (MO402) Pervious Concrete Installer Review****Date/Time: Monday, January 21 | 8:00 am - 12:00 pm****Trainers: Alan Sparkman****Location: LVCC North Hall**

Attendees will receive NRMCA Publication #2PPCRT, the reference material for the National Ready Mixed Concrete Association's Pervious Concrete Installer Certification Written Examination (an \$80 value) when registering for MO402. Manuals will be mailed to seminar registrants prior to the show.

This seminar is valuable for ready mixed concrete personnel, testing labs, inspectors, admixture personnel, designers and contractors who want to expand their business in the pervious concrete growing market. This seminar is an excellent preparatory review for the NRMCA Pervious Concrete Installer Certification.

Discussions will cover foundational information about pervious concrete mix designs, installation procedures, tools and testing of pervious concrete; an excellent introduction to pervious concrete for anyone interested in learning more about this growing market.

1. Discuss pervious concrete materials, mixture proportioning and quality control testing
2. Examine design principles of pervious concrete pavements
3. Explore placement options for various installations
4. Develop a plan to train and certify employees to place pervious concrete and launch a contracting business

4.0 continuing education hours submitted for AIA/CES/HSW and PDH.

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

MO402 Seminar Fee: \$200; \$235 after 12/3/18

Code/Title: (TUPCW) Pervious Concrete Installer Written Exam
Date/Time: Tuesday, January 23 | 3:00 pm – 5:00 pm
Location: LVCC North Hall

The two-hour written “closed book” examination consists of approximately 60 multiple-choice questions. Examinees passing the written exam with a score of 75% or higher will be certified by NRMCA as a **Pervious Concrete Technician**.

TUPCW Written Exam Fee: \$175

CONTACT INFORMATION: Questions about the pervious certification can be answered by the Tennessee Concrete Association, 615.360.7393 or sparkman@tnconcrete.org.