

NRMCA

Workforce Development



Handling Concrete Specifications, Low Strength Problems and Mixture Submittals

WEDNESDAY, MAY 1, 2019 | CHARLOTTE, NC

Course Information

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Registration and Travel Information

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Course follows all federal anti-trust guidelines.

This course earns **8 credits** towards a CCPf designation in the Concrete Technology career track. CCPf, standing for Certified Concrete Professional, is the highest professional designation in the industry. For more information, visit www.nrmca.org/steps

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PURPOSE AND BACKGROUND

Dealing with concrete specifications, troubleshooting low strength problems and ensuring proper mixture submittals can be expensive and time consuming. This one-day course will get into code and specification requirements (ACI 318, 301, ASTM C94) governing ready mixed concrete including the new ACI Building Code 318-14. It will suggest specification revisions for all around benefits in performance and cost which is based on a specification guideline document. The guideline document is the result of review of numerous concrete specifications (Section 03300) belonging to large owners and has been reviewed and supported by the NRMCA Research Engineering and Standards Committee.

Troubleshooting low strength problems is perhaps the primary reason for back charges for a concrete company. This could be almost entirely avoided by knowledgeable concrete technical personnel. The course will cover the analysis of strength test results to identify causes for low strength problems including technician competence and provide guidance to track compliance with specification requirements. Non-destructive testing techniques like the Rebound Hammer, core testing, evaluating core test results for acceptance and assignment of responsibility will be discussed.

TEXT/HANDOUTS—RETAIL VALUE \$350+

- Print out of the presentations
- *Guide to Improving Concrete Specifications*
- NRMCA/ASCC Pre-Construction Checklist
- Flowchart of ACI Mixture submittal process
- Research to Support P2P (Prescriptive to Performance specification)
- Computer program for analyzing concrete test results
- NRMCA Publications:
 - No. 133—*In-Place Concrete Strength Evaluation A Recommended Practice*
 - No. 179—*Variables that Influence Measured Concrete Compressive Strength*
 - No. 185—*Understanding Concrete Core Testing Related Specification in Practice topics and P2P Presentation*
- Selected Publications by Mr. Luke Snell
- Code and Standards Requirements for Acceptance Testing Presentation with notes and checklist

INSTRUCTORS

Luke M. Snell, is a Concrete Consultant Concrete and an Emeritus Professor of Construction from Southern Illinois University Edwardsville. He has done extensive consulting work on construction and concrete problems throughout the U.S. and internationally. He has also written over 400 articles on concrete, construction materials, and construction education. He has been instrumental in starting concrete certification programs in China, India, Taiwan, Mongolia and Saudi Arabia. He is the past chair of several ACI committees including the ACI 120 History of Concrete, The Educational Activities Committee and the Chapter Activities Committee. Snell is an ACI Fellow and has received numerous awards and was named one of the Ten Most Influential People of the Year in the Concrete Industry by *Concrete Construction* and *Concrete Producer* magazines (2007), Construction Laureate of Mongolia (2007), the Henry L Kennedy Award from ACI (2008), a Honorary Doctorate from Aria University of Sciences and Sustainability (2011) and the ACI Certification Award (2015). He is a licensed Professional Engineer in Missouri and Illinois.

Karthik Obla, Ph.D., P.E., FACI, is Vice President, Technical Services at NRMCA. With over 25 years of experience in concrete technology, he is responsible for NRMCA's concrete producer quality initiatives as well as various educational and technical programs. He supports NRMCA's P2P initiative and directs the activities of the NRMCA Research Laboratory. A fellow of ACI and a winner of ACI's Young Professional Achievement Award and ASTM Award of Appreciation from the Sustainability and Concrete Committees, Dr. Obla is an active member of various ACI, ASTM, and TRB technical committees. He has served as chair for ASTM 09.49—Pervious Concrete, and ACI 232—Fly Ash and Natural Pozzolans. He has published a book on concrete quality and a chapter in a book on concrete sustainability and has over 80 technical articles and reports. He holds a B. Tech in civil engineering from IIT (BHU) Varanasi, India and a M.S. and Ph.D. from the University of Michigan, Ann Arbor. He is a licensed professional engineer in the state of Maryland and has served as vice-president and president for the ACI San Antonio Chapter.

HANDLING CONCRETE SPECIFICATIONS

WEDNESDAY, MAY 1, 2019 | CHARLOTTE, NC | 7:30 AM - 5:00 PM

NRMCA USE ONLY
Date: _____
Member ID: _____
Confirmation# _____

ATTENDEE INFORMATION

Name/Title: _____

Company: _____

Mailing Address: _____ City/State/Zip: _____

Phone: _____ Fax: _____ Email: _____

Emergency Contact Name/Phone: _____

Dietary Restrictions/Special Needs: _____

Please Send Registration/Receipt Confirmation Email to: _____

(Notification does not guarantee class will run.)

COURSE FEES/PAYMENT AUTHORIZATION

\$295 Members and non members.

Check Payment:

*By sending a check there will be a delay in processing.

(Make check payable to NRMCA)

SunTrust Bank, c/o NRMCA, P.O. Box 79433 Baltimore, MD 21279

Registration without payment will NOT be confirmed.

Select One: Visa MasterCard AMEX

Card Number: _____

Exp. Date: _____

CVV#: _____

Cardholder Name: _____

COURSE LOCATION

Course Location:

1805 J.N. Pease Place, Charlotte, NC 28262

Parking is available onsite at no charge.

Suggested Hotels:

SpringHill Suites by Marriott, Charlotte University Research Park,
8700 Research Dr, Charlotte, NC 28262 | (704) 503-4800

Home2 Suites by Hilton, Charlotte University Research Park,
625 McCullough Dr, Charlotte, NC 28262 | (704) 659-5100

Closest Airport: Charlotte-Douglas International Airport. The airport is approximately a 15 minute ride from the CRMCA office.

NRMCA POLICIES/INFORMATION

Cancellation Policy: Full cancellation refunds, less a \$50 administration fee, will be extended until **April 8, 2019**. All cancellations after **April 8, 2019** will not be refunded. Fee cancellations cannot be transferred to a future class. Substitutions can be made at any time with no penalty. Registration cancellations must be made in writing to: meetings@nrmca.org.

Confirmation of Event: After registration and payment is processed, a registration receipt will be provided (allow up to 72 hours). A class confirmation, confirming the course will run as scheduled, will be sent via email no later than COB, **April 8, 2019**.

Important/Class Confirmation: NRMCA reserves the right to cancel this event. In the unlikely event the class is cancelled, NRMCA will refund the entire registration fee, but is not responsible for airline and hotel reservation fees.

COURSE SCHEDULE

7:30 am	Registration
8:00 am	Code and specifications governing ready mixed concrete (ACI 318, 301, ASTM C94)
9:30 am	Mixture Design Submittals <ul style="list-style-type: none">What does the engineer want?Group analysis of typical mixture design submittal
10:30 am	Break
10:45 am	Specification revisions for all around benefits
12:00 pm	Lunch
1:00 pm	Concrete Test Reports <ul style="list-style-type: none">What do they tell me?
1:45 pm	What causes low strength tests and how does it affect my business?
2:30 pm	Break
2:45 pm	Who is responsible for the low break (testing, construction, manufacturing)
3:30 pm	Using the computer program to analyze concrete strength results
3:45 pm	Investigating concrete <ul style="list-style-type: none">When to use NDT, coring, load test, petrography?

Register Online: www.nrmca.org/Education/Seminars/Handling_Specifications.htm

Or Return Form to: meetings@nrmca.org or Fax: (301) 565-8200