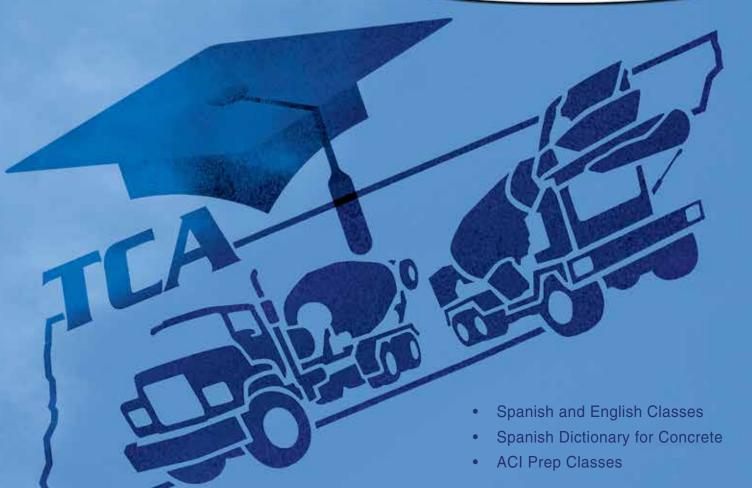
Fall 2018 VOL. 32, NO. 2 MAGAZINE



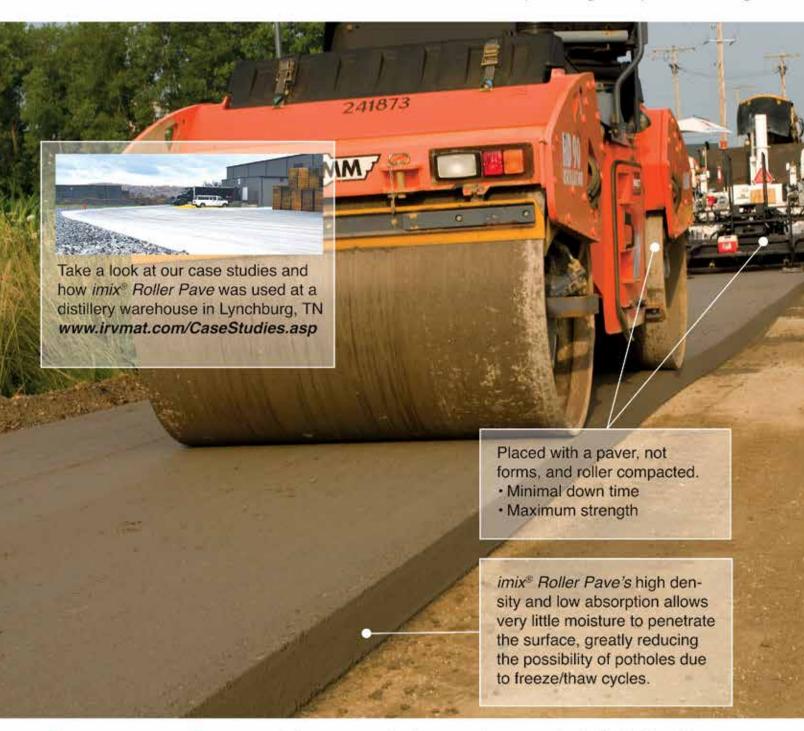
Online Academy is Open! Isn't it time for **You** to get back to school?

IRECTORY



Roller Compacted Concrete

For heavy traffic and large rolling equipment More durable than asphalt, high compressive strengths





For more information on *imix*® *Roller Pave*, or to talk to one of our Tennessee representatives, contact us **615-884-4935**

www.irvmat.com



Tennessee Concrete is published for the Tennessee Concrete Association—

705 Fort Negley Court Nashville, TN 37203 Phone: 615-360-7393 Fax: 615-360-6670

Website: www.tnconcrete.org

Publisher:

Kahoy Group, LLC

Editor:

Alan Sparkman

Advertising Director:

J. Morris Woods

Art Direction:

Donna G. Heninger

For advertising rates and information, contact Morris at 800.315.9950 x602.

Subscriptions in US, free upon request. Outside US, \$12 per year. To subscribe, contact TCA at the above address.

Articles appearing in Tennessee Concrete are frequently contributed by outside, independent sources. Conclusions drawn from these articles may be at variance with the opinions of our readers.

Tennessee Concrete welcomes response and rebuttal and will make every effort to print these responses. Send comments to: Editor, Tennessee Concrete, 705 Fort Negley Court, Nashville, TN 37203.

Tennessee Concrete and its publishers assume no liability for errors or omissions in articles or advertisements appearing in Tennessee Concrete.

© 2018 Kahoy Group, LLC

All rights reserved. The contents of this publication may not be reproduced by any means, in whole or in part, without the prior written consent of the publisher.

contents

14

Fall 2018 VOL. 32, NO. 2

PRESIDENT'S COLUMN
COSTS OF NOT TRAINING
by Cole Dodds

DIRECTOR'S COLUMNEMPLOYEE SCARCITY
by Alan Sparkman

8
DETERMINING CONCRETE
CHLORIDE PERMEABILITY
MORE EFFICIENTLY

PART 3: POSSIBLE TDOT SURFACE RESISTIVITY SPECIFICATIONS AND MIXTURE DESIGN SUGGESTIONS

by L. K. Crouch, James Locum, Blakeslee Eagan, Caleb Smith, Aaron Crowley, Sarah Dillon, Daniel Badoe and Heather P. Hall

14
2018 TCA DIRECTORY

OVERVIEW OF TCA SERVICES & STAFF

PROGRAMS, PRESIDENTS, AND DIRECTORS

- 2018 TCA Promotional, Educational & Training Programs
- TCA Past Presidents
- Our Board of Directors

30

CIM UPDATE

ADVANCING THE CONCRETE INDUSTRY

Dr. Heather J. Brown

31
INFO LINK
List of Advertisers

DIRECTORY CONTENTS AND INFORMATION PROMOTIONAL, EDUCATION-**AL & TRAINING PROGRAMS** 15 **2018 BOARD OF DIRECTORS** AND PAST PRESIDENTS **READY MIXED CONCRETE PRODUCER MEMBERS** 20 **ASSOCIATE MEMBERS AFFILIATE MEMBERS** 24 **ENGINEERING/TESTING** 26 **CONTRACTOR MEMBERS**

NRMCA PERVIOUS CERTIFIED

INSTALLERS/ TECHNICIANS



Cole Dodds 2018 TCA President

The TCA Online
Academy is just
one way TCA is
helping members
improve.

I encourage you
to take advantage
of all that TCA
offers and to
make time in your
organization to
train your most
important assets—

COSTS OF NOT TRAINING

ummer is here! The weather is hot and best I can tell all of us are busy. Being busy is a great thing (much better than the alternative!) but busyness can sometimes lead us to focus more on what's urgent (or seems to be) and not enough on what's important.

One big challenge that most ready mix producers face is keeping up with training for their people. Erratic work schedules, a backlog of business along with demanding customers, not enough mixer operators—it makes carving out consistent time for training very difficult.

What are the costs of NOT training? The list is long but here are just a few costs associated with lack of consistent training:

- Retention—people leave for jobs that invest in them—and the cost of replacing people is higher than you think.
- Mistakes that result in rejected loads or worse.
- Wear and tear on equipment
- Dissatisfied customers who often tell others about their bad experience

Our Tennessee Concrete Association (TCA) is working to help us by making training and education more accessible for our employees. TCA just launched our TCA Online Academy to provide affordable, quality training related to our product to all of our employees. If you haven't checked out the new learning system I encourage you to visit the TCA website (tnconcrete.org) and see what's it all about. There are courses already developed with your employees in mind and more are being developed as we speak.

The TCA Online Academy is just one way TCA is helping members improve. I encourage you to take advantage of all that TCA offers and to make time in your organization to train your most important assets—your people.



your people.



— 1225 Parkway — Sevierville, TN 37862

DENNIE UNDERWOOD

(865) 453-4433 (phone)

(865) 428-6083 (fax) (865) 654-2912

SICALCO, LTD is your concrete industry partner for the 2014 Turning Point in Tennessee Concrete as it has been since 1979



Contact our service center @ 800-435-1919 or general offices at 630-371-2655 for customer service



Ready Mix Concrete, Construction Products, and Aggregate Sales

(Including Crushed Concrete)

Memphis/North MS Area

TN Plants	North MS Plants
Collierville	Byhalia
Frayser	Coldwater
Memphis	Horn Lake
Rossville	Olive Branch
	Robinsonville

CENTRAL • DISPATCH (662) 393-9659 (866) 465-5585 Toll Free

www.mmcmaterials.com

UUCCIN Materials Company

Outstanding Quality & Customer Service











Crushed Stone

Kingsport (423) 245-4136

Knoxville (865) 577-2511

Chattanooga (423) 510-2600

Nashville (615) 361-8550

Jackson (731) 668-7357

Alan Sparkman
Executive Director

1

You are competing for employees with all types of jobs, not just concrete or construction opportunities.

2

The balance of power has shifted—
dramatically.

3

What people want and expect from a job—any job (including yours)—has changed.

EMPLOYEE SCARCITY

orkforce Development—it's the phrase that everyone is using and its not just the construction industry who is consumed with the difficulty of finding and keeping good people. All sectors of the economy are faced with the same burning issue—where can we find qualified people to recruit and how do we keep them once we find them?

All indications are that this is not just a blip or a temporary condition of a robust economy. This condition of employee scarcity is the new normal across our economy and it may even be worse for construction and manufacturing than it is for other sectors. Statistics reveal that in the manufacturing sector there are far more people (Baby-boomers) retiring than can be replaced, let alone hiring enough talent to grow capacity. Add to this the fact that most new work-force entrants (that's code for young people like Millennials and Gen Z) don't even consider careers in the traditional blue-collar realms and you have a perfect storm of persistent employee scarcity. All of this has a number of important implications for the concrete industry to consider, including the three listed below:

FIRST, You are competing for employees with all types of jobs not just concrete or construction opportunities. There is only one manufacturing

company in Fortune's Top 100 Best Companies to work for list (Mars Wrigley Confectionery). So not only are you competing across the full spectrum of the economy, your concrete or construction business is at the very bottom of the list for most folks looking for their first opportunity. The standard image of a construction job for new job seekers is not 'cool' and seems more like a last-resort job rather than a first-choice career. Some of that disdain isn't deserved and the truth is that many concrete/construction positions have a lot to offer—the task for us is to do a much better job communicating the 'cool' opportunities and benefits that a construction career offers.

—dramatically. Employees, not employers have the upper hand in today's economy. Employees, not jobs, are the scarce commodity so employers have nowhere near the leverage they once had. In today's world employees are doing you a favor by just considering your open position. Add to this the fact that there is dramatically more transparency today about what various jobs pay and what they offer as benefits. Job seekers can get publicly available information about the culture of your workplace, your safety record (especially true for companies that operate trucks), and your environmental record before they even apply for

your position. In most cases it's easy for potential employees to know more about your organization than you know about them, even after reviewing their job application. All of this leads to...

THIRD, what people want and expect from a job—any job (including yours)—has changed. Work/life balance, opportunities to build skills, prospects for advancement, connection to purpose and passion are all important and part of the decision-making process for many potential employees. In case some of these terms are not familiar, let me translate. Work/life balance means regular schedules and limited overtime that provides the ability for your employees to attend their children's school activities or participate in their own softball league (even during the summer). Skill building means regular training that builds the employee's personal resume and expands their capabilities. And yes, that means they are more valuable not only to you but other employers so the competition to keep them with your organization DOES NOT END after you hire them. Those new skills also need to provide a path for advancement within your organization that should include higher compensation as well as new challenges and opportunities. Finally, potential employees today care a lot about whether or not your organization is making your local community a better place to live. Allowing employees to pursue a personal cause or passion as part of their work (or while on the clock) can be a powerful motivator for both recruitment and retention.

This landscape for employment seems completely alien to many of us who started our careers in the last century but the time for looking backward is long over. Focus your energy forward and think in terms of making your organization the very best place to work, period. Who knows —you might even find yourself on a Best Place to Work list with the other cool kids in the room!

-Alan Sparkman



Determining Concrete Chloride Permeability More Efficiently

Part 3: Possible TDOT Surface Resistivity Specifications and Mixture Design Suggestions

OVERVIEW

The Tennessee Department of Transportation (TDOT) is considering two new technologies to determine concrete chloride permeability more efficiently:

- A. Surface Resistivity AASHTO TP 95-11 [1]
- B. Accelerated Curing as per AASHTO TP 95-11 [1] and ASTM C 1202-12 [2]

This paper is the final installment in a three part series of technology transfer articles. We hope that you find the information presented helpful in mixture design and evaluation. Part 3 presents possibilities for a TDOT surface resistivity specification and mixture design suggestions.

56-DAY SURFACE RESISTIVITY SPECIFICATION POSSIBILITIES

Table 1 shows the American Association of State Highway and Transportation Officials (AASHTO) category limits for surface resistivity (SR) and rapid chloride permeability (RCP). The chloride ion penetration categories, as listed in Table 1, would make reasonable standards for a SR specification for a TDOT Class D, bridge deck, mixture. TDOT recently considered establishing a new Class D-LP (lower permeability) portland cement concrete (PCC) mixture specification [3]. Prior to investigating SR, a limit of 1,200-coulombs at 56 days determined with the RCP test as per AASHTO T 277-07 [4], was under consideration. Table 2 shows possible TDOT specification limits for SR. Even if TDOT sets a different specification limit, the information presented should still be helpful.

The American Concrete Institute (ACI) recommends a statistically-based overdesign factor, known as margin, when designing concrete mixtures for compressive strength (see Figure 1). The authors recommend a similar procedure for designing concrete to meet a possible TDOT SR specification. The equation recommended is shown below:

[Target - (Multiplier)*(Multi-lab COV from AASHTO TP 95-11)*(Target)] = Specification Limit

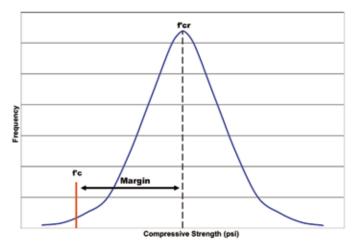


Figure 1: Relationship between Design (target) Compressive Strength f'_{cr}, Required (specified) Compressive Strength f'_c and Overdesign Margin (distance between them)

Selecting an SR Target Value

Table 3 shows AASHTO coefficients of variation (COV) for SR. The multi-laboratory COV will be used herein for two reasons. It is recommended by AASHTO if the cylinders were prepared by more than one technician, and it is also more conservative. The multiplier for the COV is a measure of how conservative the mixture designer wants to be. A higher probability of meeting the specification requires a larger multiplier which would correspond to a greater mixture cost. Table 4 shows the corresponding multipliers for various probabilities which range from extremely conservative to a 50-50 chance of meeting the specification. Table 4 also shows target design values for the five possible TDOT SR specifications at all five probabilities.

What SR Values Can Be Expected from a TDOT Class D Mixture at 56 Days?

Tables 5 and 6 display the mean 56-day SR results of several portland cement and supplementary cementing material (PC-SCM) combinations from four different Tennessee Technological University (TTU) projects. The number of SR replicates for each project is shown in row 1 of each table under the corresponding project title. The last column in each table shows a weighted (by number of replicates) average for each PC-SCM combination. The PC-SCM combinations selected are all permitted by TDOT specification 604.03 [5]. All PC-SCM combination mixtures met

TABLE 1. CATEGORIES FOR SURFACE RESISTIVITY AND RAPID CHLORIDE PERMEABILITY

CHLORIDE ION PENETRATION	SURFACE RESISTIVITY TEST (4X8-INCH CYLINDERS WITH a =1.5 INCHES IN $K\Omega$ -CM	AASHTO T 277-07 CHARGE PASSED IN COULOMBS
High	< 12	> 4000
Moderate	12 – 21	> 2000 – 4000
Low	21 – 37	> 1000 – 2000
Very Low	37 – 254	100 – 1000
Negligible	> 254	< 100

TABLE 2. POSSIBLE 56-DAY SURFACE RESISTIVITY SPECIFICATIONS

POSSIBLE 56-DAY RAPID CHLORIDE PERMEABILITY SPECIFICATION LIMITS (COULOMBS)	AASHTO CATEGORY LIMITS	CORRELATION EQUATION	ROUNDED EQUIVALENT 56-DAY SURFACE RESISTIVITY SPECIFICATION LIMIT (ΚΩ-CM)
4000	Moderate Limit	-	12
3000	-	SR = 11494(RCP) ^{-0.829}	18
2000	Low Limit	-	21
1200	-	SR = 11494(RCP) ^{-0.829}	32
1000	Very Low Limit	-	37

TABLE 3. AASHTO ALLOWABLE COEFFICIENTS OF VARIATION FOR SURFACE RESISTIVITY

P 95-11
}
5

TABLE 4. TARGET VALUES FOR SELECTED PROBABILITY OF MEETING 56-DAY SURFACE RESISTIVITY SPECIFICATIONS

PROBABILITY OF MEETING SPECIFICATION	MULTIPLIER FOR COV	SR TARGET FOR 56-DAY 12 (KΩ-CM)	SR TARGET FOR 56-DAY 18 (ΚΩ-CM)	SR TARGET FOR 56-DAY 21 (KΩ-CM)	SR TARGET FOR 56-DAY 32 (KΩ-CM)	SR TARGET FOR 56-DAY 37 (KΩ-CM)
> 99%	3.00	19.2	28.8	33.6	51.2	59.2
90%	1.65	15.1	22.7	26.5	40.3	46.6
80%	1.30	14.3	21.5	25.1	38.2	44.2
70%	0.85	13.4	20.1	23.5	35.8	41.4
50%	0.0	12	18	21	32	37

^{*100} PC is grey, 20F & 25F is red, 25C is orange, 35SL is green, 30SL20F & 35SL15F are blue

Determining Concrete Chloride Permeability More Efficiently

Part 3: Possible TDOT Surface Resistivity Specifications and Mixture Design Suggestions

TDOT 604.03 plastic and hardened property requirements. For comparison, all PC-SCM combination mixtures had a water-to-cementing materials ratio (w/cm) of 0.37, and the fine aggregate was 38% of the total aggregate by volume. The SR results presented are not necessarily the results that will be obtained but rather a good estimate of what to expect.

Tables 4, 5, and 6 are color coded to show what PC-SCM combination could be expected to produce the desired results. TTU researchers do not have extensive data on a PC-SCM combination mixture that is in compliance with TDOT 604.03 SCM requirements and has a mean SR result greater than 47 k Ω -cm at 56 days. TTU researchers do have data on several PC-SCM combination mixtures that meet the plastic and hardened property requirements of TDOT 604.03 but fail to meet the SCM requirements while having a mean SR well in excess of 47 k Ω -cm at 56 days. However, that is a story for another day.

Hitting the SR Target Value

When an SR target value for mixture design has been selected, consult Tables 5 and 6 to determine the most economical (or available) PC-SCM combination that has a good chance of hitting the target SR value. Next, produce at least three small batches of various mixture designs; however, more batches would be preferable. These batches should meet TDOT 604.03 specifications while varying either the SCM dosage rate or the w/cm but not both. Conduct SR at 56 days and plot the results (y-axis) versus the variable (x-axis). Locate the SR target value on the y-axis and proceed horizontally to the curve. Afterward, proceed vertically to the x-axis and read the variable corresponding to the SR target value. It is important to note that the target value is interpolated along the curve which should never be used to extrapolate outside of the data set to determine the variable amount to use for a final trial mixture. A few batches of the final trial mixture should then be produced to confirm the SR result.

Figure 2 shows an example of the procedure. The hypothetical mixture designer wants greater than a 99% chance of meeting a 32 k Ω -cm 56-day SR specification. Table 4 indicates a target SR value of 51.2 k Ω -cm. The mixture designer decides to try a 50% PC, 35% slag, and 15% Class F fly ash mixture meeting TDOT 604.03 specifications. The variable chosen is w/cm. Four batches of each of four different w/cm ratio mixtures (all meeting TDOT 604.03 plastic and hardened property requirements) are produced and tested for SR at 56 days. Using the plotted results, the w/cm

ratio (0.363) corresponding to the SR target value (51.2 k Ω -cm) is determined as shown in Figure 2.

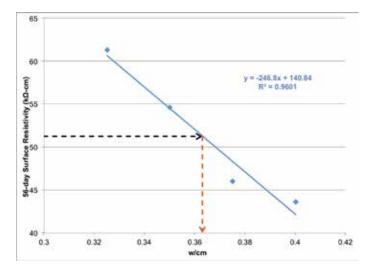


Figure 2: Plot for Determining w/cm Corresponding to SR Target Value

28-DAY SR SPECIFICATION POSSIBILITIES

If concrete chloride permeability could be determined more rapidly, bridge deck mixture design development, mixture design submittals, quality control, and quality assurance testing could all be streamlined. Therefore, a 28-day SR specification would be preferable to a 56-day SR specification. However, accuracy should not be sacrificed for speed. The second article in this series showed that 28-day normal curing was slightly better than 28-day accelerated curing at predicting later age SR results and vastly superior to accelerated curing in logistics. Figure 3 shows 28-day SR results as a function of 56-day SR results. There is no doubt that this seems backwards, but the regression equation is needed to determine what 28-day SR result corresponds to a certain 56-day SR result. Table 7 shows the 28-day SR results equivalent to the possible TDOT SR specification limits from Table 2.

TABLE 5. 56-DAY MEAN SURFACE RESISTIVITY RESULTS FOR PC AND FLY ASH MIXTURES

MIXTURE	C ASH (%)	F ASH (%)	TTU EFFECT OF SCMs (3X)	TDOT SR (20X)	TTU TDOT CLASS D MIXTURES (6X)	TTU APPROVED AGGREGATES (6X)	WEIGHTED MEAN
100 PC	0	0	14.0	-	14.3	-	14.2
20F	0	20	17.9	18.8	17.4	16.5	18.1
25F	0	25	22.2	-	19.7	-	20.5
25C	25	0	18.0	-	16.0	-	16. <i>7</i>

TABLE 6. 56-DAY MEAN SURFACE RESISTIVITY RESULTS FOR MIXTURES CONTAINING SLAG

MIXTURE	SLAG (%)	F ASH (%)	TTU EFFECT OF SCMs (3X)	TDOT SR (20X)	TTU TDOT CLASS D MIXTURES (6X)	TTU APPROVED AGGREGATES (6X)	WEIGHTED MEAN
35SL	35	0	-	-	33.2	-	33.2
30SL20F	30	20	-	-	47.0	-	47.0
35SL15F	35	15	44.8	43.0	46.3	41.0	43.4

TABLE 7. POSSIBLE 28-DAY SURFACE RESISTIVITY SPECIFICATIONS

POSSIBLE 56-DAY SURFACE RESISTIVITY SPECIFICATION LIMIT (KΩ-CM)	CORRELATION	EQUATION	EQUIVALENT 28-DAY NORMALLY- CURED SURFACE RESISTIVITY SPECIFICATION LIMIT ($K\Omega$ -CM)
12			9.1
18			13.4
21	TDOT SR Project Data	$SR_{28} = 0.7153(SR_{56}) + 0.5558$	15.0
32			23.4
37			27.0

TABLE 8. TARGET VALUES FOR SELECTED PROBABILITY OF MEETING 28-DAY SURFACE RESISTIVITY SPECIFICATIONS

PROBABILITY OF MEETING SPECIFICATION	MULTIPLIER FOR COV	SR TARGET FOR 28-DAY 9.1 (KΩ-CM)	SR TARGET FOR 28-DAY 13.4 (ΚΩ-CM)	SR TARGET FOR 28-DAY 15.0 (ΚΩ-CM)	SR TARGET FOR 28-DAY 23.4 (ΚΩ-CM)	SR TARGET FOR 28-DAY 27.0 (KΩ-CM)
> 99%	3.00	14.6	21.4	24.0	37.4	43.2
90%	1.65	11.5	16.9	18.9	29.5	34.0
80%	1.30	10.9	16.0	17.9	27.9	32.2
70%	0.85	10.2	15.0	16.8	26.2	30.2
50%	0.0	9.1	13.4	15.0	23.4	27.0

^{*100} PC is grey, 20F & 25F is red, 25C is orange, 35SL is green, 30SL20F & 35SL15F are blue

Determining Concrete Chloride Permeability More Efficiently

Part 3: Possible TDOT Surface Resistivity Specifications and Mixture Design Suggestions

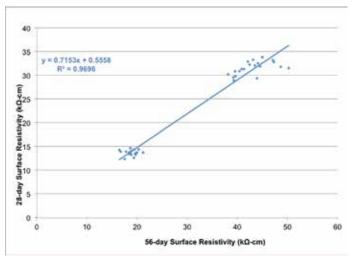


Figure 3: Plot for Determining w/cm Corresponding to SR Target Value

Selecting an SR Target Value

Table 8 shows various probabilities and the corresponding multipliers. Table 8 also shows target design values for the five possible 28-day TDOT SR specifications at all five probabilities.

What SR Values Can Be Expected from a TDOT Class D Mixture at 28 Days?

Tables 9 and 10 display the mean 28-day SR results of several PC-SCM combinations from four different TTU projects. The number of SR replicates for each project is shown in row 1 of each table under the corresponding project title. The last column in each table shows a weighted (by number of replicates) average for each PC-SCM combination. The PC-SCM combinations selected are all permitted by TDOT Specification 604.03. All PC-SCM combination mixtures met TDOT 604.03 plastic and hardened property requirements. For comparison, all PC-SCM combination mixtures had a w/cm of 0.37 and the fine aggregate was 38% of the total aggregate by volume. The SR results presented are not necessarily the results that will be obtained but rather a good estimate of what to expect.

Tables 8, 9, and 10 are color coded to show what PC-SCM combination could be expected to produce the desired results. TTU researchers do not have extensive data on a PC-SCM combination mixture that is in compliance with TDOT 604.03 SCM requirements and has a mean SR result greater than 33 k Ω -cm at 28 days. TTU researchers do have data on several PC-SCM combination mixtures that meet the plastic and hardened property

requirements of TDOT 604.03 but fail to meet the SCM requirements while having a mean SR well in excess of 33 k Ω -cm at 28 days. Again, that is a story for another day.

Hitting the SR Target Value

The graphical procedure is identical to that used for determining the 56-day variable (SCM dosage or w/cm) corresponding to the SR target value except 28-day data is used.

WHAT IS NEXT?

The next planned article, although not part of the current series, is closely related: Going Past Current TDOT 604.03 SCM Specifications to Further Reduce Chloride Permeability.

DISCLAIMER

The opinions expressed herein are those of the authors and not necessarily the opinions of the Federal Highway Administration (FHWA), TDOT, or the Tennessee Concrete Association.

REFERENCES

- AASHTO TP 95-11. "Standard Method of Test for Surface Resistivity Indication of Concrete's Ability to Resist Chloride Ion Penetration." American Association of State Highway and Transportation Officials. Provisional Standards, 17th edition, June 2013.
- ASTM C 1202-12. "Standard Test Method for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration." American Society for Testing and Materials Annual Book of ASTM Standards. Vol. 04.02, 2014, pp. 677-684.
- 3. "Lowering the Chloride Permeability of a TDOT Class D PCC Mixture, Part 2: Expanding the Informational Catalog," Crouch, Rogers, Dillon, Crowley, Hall and Badoe in *Tennessee Concrete* Winter 2013/14, Vol. 27, No. 3.
- AASHTO T 277-07. "Standard Method of Test for Electrical Indication of Concrete's Ability to Resist Chloride Ion Penetration." American Association of State Highway and Transportation Officials. Standard Specifications for Transportation Materials and Methods of Sampling and Testing Part 2A. 2011.
- Tennessee Department of Transportation, Standard Specifications for Road and Bridge Construction (Section 604.03), January 1, 2015.

TABLE 9. 28-DAY MEAN SURFACE RESISTIVITY FOR PC AND FLY ASH MIXTURES

MIXTURE	C ASH (%)	F ASH (%)	TTU EFFECT OF SCMs (3X)	TDOT SR (20X)	TTU TDOT CLASS D MIXTURES (6X)	TTU APPROVED AGGREGATES (6X)	WEIGHTED MEAN
100 PC	0	0	12.0	-	13.3	-	12.7
20F	0	20	12.9	13.8	12.5	12.5	13.3
25F	0	25	14.1	-	13.5	-	13.7
25C	25	0	12.6	-	13.1	-	12.9

TABLE 10. 28-DAY MEAN SURFACE RESISTIVITY FOR MIXTURES CONTAINING SLAG

MIXTURE	SLAG (%)	F ASH (%)	TTU EFFECT OF SCMs (3X)	TDOT SR (20X)	TTU TDOT CLASS D MIXTURES (6X)	TTU APPROVED AGGREGATES (6X)	WEIGHTED MEAN
35SL	35	0	-	-	26.6	-	26.6
30SL20F	30	20	-	-	32.3	-	32.3
35SL15F	35	15	31.4	31.6	34.6	30.2	31.9

ACKNOWLEDGEMENTS

The authors wish to gratefully acknowledge the support of TDOT and FHWA. Special thanks to Gary Head, Jamie Waller, and Bill Trolinger.

We also wish to thank Frank Lennox of Buzzi-Unicem, Meagan Dangle of Lafarge North America, and Denny Lind of BASF for their extensive donations of portland cement, slag, chemical admixtures and silica fume to the project. The authors appreciate the procurement help provided by Alan Sparkman and the Tennessee Concrete Association.

In addition, the authors would like to thank Mark Davis and Perry Melton for their patience and skill in fabrication, maintenance, and repair of the equipment. We would also like to thank Lee Rogers, and Jacob Brooks for their help with the project.

Further, we appreciate the support of the TTU Department of Civil and Environmental Engineering.

Finally, the authors appreciate the administrative and information technology support provided by the TTU Center for Energy Systems Research, particularly Tony Greenway, Etter Staggs, and Linda Lee.

AUTHOR INFORMATION

L. K. Crouch, Ph.D., P.E. is a professor of Civil Engineering at Tennessee Technological University.

James Locum, M.S., E.I. is a civil engineering doctoral student at Tennessee Technological University.

Blakeslee Eagan, M.S., E.I. is a project engineer at Berry Engineers in Cleveland, TN and a former civil engineering graduate student at Tennessee Technological University.

Caleb Smith, M.S., E.I. is a Graduate Transportation Associate in the Strategic Investments Division of the Tennessee Department of Transportation and a former civil engineering graduate student at Tennessee Technological University.

Aaron Crowley, Ph.D., E.I. is a recent doctoral graduate from Tennessee Technological University. Aaron is a staff engineer at K. S. Ware and Associates in Nashville, TN.

Sarah Dillon, Ph.D., E.I. is a recent doctoral graduate from Tennessee Technological University. Sarah is a staff engineer at TRC Worldwide Engineering in Brentwood, TN.

Daniel Badoe, Ph.D. is a professor of Civil Engineering at Tennessee Technological University.

Heather P. Hall, P.E. is Assistant Engineering Director of Tennessee Department of Transportation Materials and Tests Division.

2018 Concrete oncrete ssociation Membership Directory



Overview of ICA Services and Staff 14
TCA Promotional, Educational and Training Programs15
2018 Board of Directors
Past Presidents
Ready Mixed Concrete Producers 16
Associate Members20
Affiliate Members22
Engineers/Testing Labs24
Concrete Contractors26
NRMCA Installers/Technicians28



TCA Services & **STAFF**

The Tennessee Concrete Association (TCA) was founded in 1986 to promote the increased use of ready mixed concrete in Tennessee. Our mission statement is: "The TCA is the unified voice for the concrete industry to improve our image and awareness through advocacy, promotion and education that support our members, our community, and our future." We work to fulfill this mission in all of our activities. We invite you to join us in building a concrete industry we can all be proud of.

Supported primarily by membership dues, the association is governed by a 15 member board of directors elected annually by members. The board includes 10 ready-mixed producer members who direct local promotional programs in each of our three regions.

Association **STAFF**



Alan Sparkman Executive Director



Darla SparkmanDirector of Certifications
& Events



Donna Thompson Marketing, Online Learning and Event Manager

Tennessee Concrete Association

2018 TCA PROGRAMS

Annual Convention – This event brings all members together to celebrate the year's accomplishments.

Tennessee Concrete Magazine – Published 3 times annually.

Membership Directory - Published annually with information advertising your company.

Member Updates - Thoughout the year, to keep you informed of Association programs, industry activities, and promotional events.

Concrete Excellence Awards – Design Construction and Environmental awards.

Product Demonstrations – Decorative, Pervious, Insulated Concrete Forms, Ultrathin Whitetopping, & Flowable Fill.

Statewide High School Concrete Essay Contest

Trade & Home Show Displays

TCA Online Academy - Our new online learning system offers prep courses to help concrete professionals prepare for certification courses in flatwork, and more. https://www.pathlms.com/tca

TCA Website - www.tnconcrete.org

Video & Technical/Promotional Literature Library – Maintained as a members resource.

Training and Certification

- ACI Field Testing Technician, Grade 1
- ACI Flatwork Finisher & Technician
- **ACI Concrete Laboratory Testing** Technician Grade 1 & 2
- **ACI Concrete Construction Special** Inspector
- ACI Concrete Strength Testing **Technician**
- NRMCA Certified Driver Training
- NRMCA Certified Concrete Production **Technologist**
- NRMCA Pervious Installer Certification
- NRMCA Certified Concrete Sales Professional

Past TCA PRESIDENTS

1986-1987 Reid Brown, PH.D. Vulcan Materials

Chattanooga

1988

Richard Jones, Jr. Southdown, Inc. Knoxville

1989

Bob Mayfield

Forcum-Lannom Dyersburg

1990

Craig Kirchoff

Lone Star Industries Nashville

Joe Fowler

American Limestone Co. Knoxville

1992

Ernie Walker, Sr.

Transit-Mix Concrete Johnson City

1993-1994

E.H. (Sonny) **Garrott III** Garrott Brothers

Continuous Mix Galatin

1995-1996

Joe Bigford

City Concrete Co. Jackson

1997-1998

Carl Storms

Concrete Materials Inc. Morristown

1998-1999

Joe Fulks

Harper Construction Shelbyville

1999-2000

Mike Carrier

Carrier Concrete Memphis

2000-2001

Walter Law

Ready Mix Concrete Maryville

2001-2002

Bob Haldrup

Irving Materials, Inc. Nashville

2002-2003 John Loven

Loven Ready Mix Greeneville

2003-2004

Steve Herron

Metro Ready Mix Nashville

2004-2005

Greg Garren

Union Concrete Maynardville

2005-2006

Jim Hughes

Builders Supply Co. Cookeville

2006-2007 **Rick Odle**

Southern Concrete

Products Jackson

2007-2008

Dennie Underwood

Blalock Ready Mix Sevierville

2008-2009

John Curtis

Irving Materials, Inc. Nashville

2009-2010

Phillip Palczer

City Concrete Memphis

2010-2011

Andrea Childress

Childress Concrete Co. Lewisburg

2011-2012

Steve Smith

A&W Ready Mix Concrete Kodak

2012-2013

Mike Zagula

Metro Ready Mix Concrete Co.

2013-2014

Derris Johns

Mid-South Concrete

2014-2015

Bate Bond

B.T. Redi-Mix

2015-2016

Bobby CrassC&C Concrete Products

2016-2017

Tonya Alexander

Irving Materials, Inc.

Our Board of DIRECTORS

President

COLE DODDS

Southern Concrete Products

Vice President

TIM COSTCO

Sequatchie Concrete

Secretary/Treasurer

WESLEY BLALOCK

Blalock Ready Mix

Ready Mixed Directors

SAM PITTENGER

Harrison Construction Co.

CALVIN KINGERY

Irving Materials

DUANE KING

Screaming Eagle Ready Mix

SHELLEY PARHAM

Ready Mix USA

WALTON WILLIAMS

River City Concrete

Associate, and Affiliate Directors

CODY EATON

Cemex

BRYAN STREVEL

Boral Resources

ANGIE THURMAN

Rogers Group

CHRIS HUDSON

Glenn E. Mitchell

Ready Mixed Concrete Producer Members

A&W Ready Mix, LLC

PO Box 578 Kodak, TN 37764 Primary Contact: Steve Smith Phone: (865) 932-4010 Fax: (865) 365-2734 www.awreadymix.com Products/Services: Ready Mix Concrete, Aggregate Hauling, NRMCA Certified Plant

Abernathy Concrete Co., Inc.

734 South First St. Pulaski, TN 38478 Primary Contact: Bill Abernathy Phone: (931) 363-1527 Fax: (931) 363-1528 Products/Services: Ready Mixed Concrete, Aggregates & All Related Concrete Supplies

Blalock Ready Mix

1836 Ridge Rd. Pigeon Forge, TN 37863 Primary Contact: Wes Blalock Phone: (865) 453-2808 Fax: (865) 428-6083 www.blalockcompanies.com Products/Services: Ready Mix Concrete, Concrete Pumping, RediRock Retaining Wall System, NRMCA Certified Plants, NPCA Certified Precast Additional Information: Dennie Underwood, Technical Services Mgr.

BP&G Materials

4650 Hwy 11E Bluff City, TN 37618 Primary Contact: Fred Gibson Phone: (423) 538-8172 Fax: (423) 538-6298 www.bpgmaterials.com Products/Services: Ready Mix Concrete, Retaining Wall Blocks

Bradley Concrete Co.

PO Box 3022 Cleveland, TN 37320 Primary Contact: Charlie Lay Phone: (877) 541-4542 Fax: (423) 479-4542 www.lambcon.us Products/Services: Ready Mix Concrete Chattanooga, Cleveland, Charleston, Knoxville, Lenoir City, Athens

Builders Supply Co.

50 Scott Ave. Cookeville, TN 38501 Primary Contact: Clark Simpson Phone: (931) 526-9704 Fax: (931) 528-8510 www.bscblock.com Products/Services: Ready Mix Concrete, Building Materials, Concrete Block Manufacturer, Brick & Lumber

Byerley Construction Co. Inc.

1929 Brookside Dr. Kingsport, TN 37660 Primary Contact: Jerry Byerley Phone: (423) 246-6421 Fax: (423) 246-6421 Products/Services: Ready Mixed Concrete Services, General Contracting, Concrete Finishing, Acid Staining, Decorative, Driveways

C & C Concrete Products, Inc.

193 Towe String Rd. Jacksboro, TN 37757 Primary Contact: Bobby Crass Phone: (423) 562-7425 Fax: (423) 562-5499 www.c-cconcrete.com Products/Services Ready Mix Concrete, ICF's, Block, State approved, Fiber, Rebar, Masonry Supplies & Aggregates

C & C Redi-Mix Inc.

5710 Harriman Hwy Oliver Springs, TN 37840 Primary Contact: Tony Crass Phone: (865) 435-1445 Fax: (865) 435-0551 www.ccreadymix.com Products/Services: Ready Mix Concrete Services Additional Information:

LaFollette

Phone: (423) 562-7425

Chandler Concrete Co. Inc

PO Box 131 Burlington, NC 27216 Primary Contact: Ted Chandler Phone: (336) 226-1181 Fax: (336) 226-2969 www.chandlerconcrete.com Products/Services: Ready Mix Concrete Services, Block, Hardscape & Masonry Products, **Building Supply Products** Additional Information:

Boone

805 State Farm Rd Suite 203 Boone, NC 28607 Phone: (828) 264-8694

Cumberland Supply Co. Inc.

PO Box 216 Carthage, TN 37030 Primary Contact: Phillip Hudson, Phone: (615) 735-1786 Fax: (615) 735-1475

www.cumberlandsupplyco.com Products/Services: Ready Mix Concrete, TDOT Certified, Lumber, Hardware, Masonry & Millwork

Dixie Ready-Mix Concrete Co., Inc.

1414 Old Jacksboro Hwy La Follette, TN 37766 Primary Contact: Ray Henson Phone: (423) 562-2277 Fax: (423) 562-0424 Product/Services: Ready-Mix Concrete, Wire Mesh-Rebar, Septic Tanks, Wall Blocks, Masonry Sand

Garrott Bros Continuous Mix, Inc.

PO Box 419 Gallatin, TN 37066 Primary Contact: Daniel Bugbee

Phone: (615) 452-2385 Fax: (615) 452-8952 www.garrottbros.com Product/Services: Ready Mix

Concrete Services

Harrison Construction Co.

4817 Rutledge Pike Knoxville, TN 37914 Primary Contact: Doug Brown Phone: (865) 934-6518 Fax: (865) 546-9744 www.harrisoncc.com Product/Services: Ready Mix Services and Aggregate Sales Additional Information:

Dandridge.

1070 Epco Dr. Dandridge, TN 37725 **Morristown** 1527 W. 1st N. St. Morristown, TN 37814

Irving Materials Inc. 2001 Antioch Pike

Nashville, TN 37013

Primary Contact: Tonya Alexander Phone: (615) 884-4935 Fax: (615) 242-7464 www.irvmat.com Products/Services: Ready Mixed Concrete, Related Products, Aggregate, Sand & Pervious Concrete Additional Information:

Clarksville

261 Needmore Rd. Clarksville, TN 37042 Phone: (931) 552-6026 Columbia 4616 Hardison Road

Columbia, TN 38401 Phone: (931) 381-7900

Cookeville

2800 Dacco Quary Road Cookeville, TN 38506 Phone: (931) 526-6107

Crossville

252 Maryette Ave. Crossville, TN 38555 Phone: (931) 484-5588

Dickson

1550 Old Columbia Road Dickson, TN 37055 Phone: (615) 740-7001

Dover

646 Highway 79 Dover, TN 37058 Phone: (931) 232-7001

Fayetteville 8 Cessna Road

Fayetteville, TN 37334 Phone: (931) 438-7337

Ready Mixed Concrete Producer Members

Franklin

515 Downs Blvd. Franklin, TN 37064 *Phone:* (615) 794-2552

Goodlettsville

109 Long Drive Goodlettsville, TN 37072 *Phone:* (615) 384-3524

Jamestown

PO Box 397 Jamestown, TN 38556 *Phone:* (931) 879-5098

Lawrenceburg

2112 Helton Drive Lawrenceburg, TN 38464 *Phone:* (931) 762-6409

Lebanon

PO Box 2534 Lebanon, TN 37090 *Phone:* (615) 444-0454

Livingston

PO Box 234 Livingston, TN 38570 *Phone:* (931) 823-5060

Manchester

213 E. Coffee Street Manchester, TN 37355 *Phone:* (931) 723-8747

Morrison

5445 Manchester Highway Morrison, TN 37357 *Phone:* (931) 815-1070

Mt. Juliet

445 Industrial Drive Mt. Juliet, TN 37122 *Phone:* (615) 758-5687

Murfreesboro

5024 Old Nashville Hwy Murfreesboro, TN 37129 *Phone:* (615) 692-0123

Nashville

1433 Cowan Street Nashville, TN 37207 *Phone:* (615) 256-6821

Nashville

6616 Robertson Road Nashville, TN 37209 *Phone:* (615) 356-9301

Nashville

151 Bush Road Nashville, TN 37217 *Phone:* (615) 367-2918

Smithville

805 S. College Street Smithville, TN 37166 *Phone:* (615) 597-4149

Spring Hill

758 Beechcroft Road Spring Hill, TN 37174 Phone: (931) 486-9072

Springfield

PO Box 40 Springfield, TN 37172 *Phone:* (615) 384-3524

Tullahoma

519 Vollney Street Tullahoma, TN 38388 *Phone:* (931) 455-5432

Winchester

612 David Crockett Hwy Winchester, TN 37398 Phone: (931) 967-1738

Lambcon, Inc.

PO Box 5148 Cleveland, TN 37320 Primary Contact: Adam Lambert Phone: (877) 541-4542 Fax: (423) 479-4542 www.lambcon.us Products/Services: Ready Mix Concrete - Chattanooga, Athens, Cleveland, Knoxville, Lenior City

Memphis Ready Mix

1029 John A. Denie Rd.
Memphis, TN 38134
Primary Contact: Jason Johnson
Phone: (901) 386-8911
Fax: (901) 386-8776
www.buzziunicemusa.com
Products/Services: Ready
Mixed Concrete & Related
Concrete Products Serving the
Greater Memphis & Northern
Mississippi Area

Mid South Concrete Inc.

PO Box 1220 Pulaski, TN 38478 Primary Contact: Derris Johns Phone: (931) 363-0690 Fax: (931) 363-5326 www.midsouthconcrete.com Products/Services: Custom Design Ready Mix Concrete, Concrete Related Accessories, Materials, Aggregates, & Culverts Additional Information:

Leoma

2408 Hwy 43 Leoma, TN 38468 *Phone:* (931) 363-0690

Mid-State Mobile Concrete, Inc.

3636 Central Pike Hermitage, TN 37076 Primary Contact: Gary Vincent Phone: (615) 533-2315 Fax: (615) 885-3640 www.midstatemobileconcrete. com

Products/Services: Mobile Ready Mix Concrete & Concrete

Pumping Services

Mid-Way Materials, Inc.

128 Natchez Trace Rd.
Camden, TN 38320
Primary Contact: Judy Dobson
Phone: (731) 584-6991
Fax: (731) 584-2523
Products/Services: Ready Mixed
Concrete, Blocks and Masonry
Supplies, Decorative Concrete
Supplies & Brick.
Additional Information:

McKenzie

24 S. Oak St. McKenzie, TN 38201 *Phone:* (731) 352-3850

MMC Materials Inc.

PO Box 673
Horn Lake, MS 38637
Primary Contact: Scott Craft
Phone: (662) 393-7676
Fax: (662) 393-7323
www.mmcmaterials.com
Products/Services: Ready
Mixed Concrete, Crushed
Concrete, Redi Rock Retaining
Walls, Ready Grout, Smart
Concrete(Real-TIme Strength
Results) & Crushed Concrete
Aggregates

Tennessee Plants

Memphis, Memphis/Downtown, Rossville, Collierville

North Mississippi Plants

Additional Information:

Horn Lake, Olive Branch, Byhalia, Coldwater, Robinsonville

Newport Paving & Ready Mix

351 Industrial Rd Newport, TN 37822 Primary Contact: Joe Malone Phone: (423) 623-8671 Fax: (423) 623-8699 www.blalockcompanies.com Products/Services: Ready Mix Concrete, NRMCA Certified Plant & Fleet

Orgain Ready Mix Concrete Co.

PO Box 561 Clarksville, TN 37041 Primary Contact: John Manning Phone: (931) 647-1597 Fax: (931) 552-2484 www.orgainreadymix.com Products/Services: Ready Mix Concrete and Pre-Cast Septic Tanks

Potter South East LLC 511 E. Monticello Pike

Huntsville, TN 37756

Primary Contact: Dwayne
Potter
Phone: (423) 663-8222
Fax: (423) 663-9574
Products/Services Heavy
Highway Construction Co. with
Centralized Efforts in Road &
Bridge Construction serving

TDOT Projects in TDOT Region 1

Ready Mix USA

PO Box 2389 Knoxville, TN 37901 Primary Contact: Joe Fowler Phone: (865) 573-4501 Fax: (865) 573-3327 www.readymixusa.com Products/Services: Ready Mixed Concrete Additional Information:

Bristol

501 Janie Hammitt Dr. Bristol, VA 24201 *Phone:* (276) 669-3107

Chattanooga

604 Hudson Road Chattanooga, TN 37405 *Phone*: (423) 892-6444

Chattanooga

2 Pelican Dr. (River Plant) Chattanooga, TN 37416 Phone: (423) 892-6444

Ready Mixed Concrete Producer Members

Dalton

419 N. Selvidge St. Dalton, GA 30720 Phone: (706) 278-6044

Grav

102 Watertank Rd. (BoonesCreek) Gray, TN 37615 Phone: (423) 246-7701

Greeneville

1532 Industrial Rd. Greeneville, TN 37745 Phone: (423) 639-2041

Kingsport

1543 S. Wilcox Dr. Kingsport, TN 37660 Phone: (423) 246-7701

Knoxville

2200 Neyland Dr. Knoxville, TN 37916 Phone: (865) 544-0320

Knoxville

10509 Lexington Dr. Knoxville, TN 37932 Phone: (865) 573-4501

Lafayette

22920 Hwy 193 Lafayette, GA 30728 Phone: (706) 278-6044

Maynardville

762 Mavnardville Hwv. Maynardville, TN 37807 Phone: (423) 587-2050

Morristown

663 South Sugar Hollow Rd. Morristown, TN 37813 Phone: (423) 587-2050

New Tazewell

PO Box 1050 New Tazewell, TN 37824 Phone: (865) 573-4501

Rockford

547 National Dr. Rockford, TN 37853 Phone: (865) 573-4501

River City Concrete, Inc.

9160 Hwy 128 South Savannah, TN 38372 Primary Contact: Wade Williams Phone: (731) 925-0271 Fax: (731) 925-9894 www.rivercity-concrete.com Products/Services: Ready Mix Concrete, Septic/Precast Products, Concrete Blocks, Concrete Reinforcing Products, Sand & Gravel Hauling Additional Information:

Selmer

850 Mulberry Ave. Selmer, TN 38375 Phone: (713) 645-7903

Waynesboro

1041 Lawrenceburg Hwy Waynesboro, TN 38485 Phone: (931) 722-3816

Screaming Eagle Ready Mix

490 Barge Point Rd. Clarksville, TN 37042 Primary Contact: Duane King Phone: (931) 553-4101 Fax: (931) 553-5011 www.screamingeaglereadymix. Products/Services: Concrete

Services, Related Supplies, Concrete Tools, Building Materials & Sealers Additional Information:

Clarksville

1040 International Blvd. Clarksville, TN 37040 Phone: (931) 553-4101

Sequatchie Concrete Service

PO Box 129

South Pittsburg, TN 37380 Primary Contact: Tim Costo Phone: (423) 718-0441 Fax: (423) 837-7479 www.seqconcrete.com Products/Services: Ready Mix Concrete Production, Structural Precast, Concrete Block, Sand, & Segmented Retaining Walls Additional Information:

Athens

3106 Lee Hwy. Athens, TN 37303 Phone: (423) 744-9049

Chattanooga

1400 East 39th Street Chattanooga, TN 37407 Phone: (423) 867-4510

Chattanooga

3960 Cromwell Road Chattanooga, TN 37421 Phone: (423) 892-8177

Dayton

131 Avant Lane Dayton, TN 37321 Phone: (423) 775-9787

Dunlap

Hwy 128 Branch Road Dunlap, TN 37327 Phone: (423) 949-3338

Knoxville

PO Box 11869 Knoxville, TN 37939 Phone: (865) 524-3351

Madison

656 Palmer Road Madison, AL 35758 Phone: (256) 772-0178

Scottsboro

21266 John T. Reid Parkway Scottsboro, AL 35768 Phone: (256) 259-9863

South Pittsburg

210 Ash Ave. South Pittsburg, TN 37380 Phone: (423) 837-0838

Trenton

974 Sunset Drive Trenton, GA 30752 Phone: (706) 657-6227

Southern Concrete Products, Inc.

PO Box 1256 Jackson, TN 38302 Primary Contact: Rick Odle Phone: (731) 422-3358 Fax: (731) 427-1604 www.southernconcrete.com Products/Services: Ready Mix Concrete. Concrete Fence. Building Materials, Parking Bumpers & Septic Tanks, Pervious

Bolivar

18260 Hwy 125 South Bolivar, TN 38008 Phone: (731) 422-3358

Additional Information:

Dyersburg

1705 Tennyson Ave. Dyersburg, TN 38024 Phone: (731) 422-3358

Henderson

745 US Hwy 45 S. Henderson, TN 38340 Phone: (731) 422-3358

Jackson

860 Westover Rd Jackson, TN 38301 Phone: (731) 422-3358

Jackson

86 United Dr. Jackson, TN 38305 Phone: (731) 422-3358

Lexington

266 E. Church St. Lexington, TN 38351 Phone: (731) 968-2537

Milan

2500 Graball St. Milan, TN 38358 Phone: (731) 422-3358 **Paris**

535 Russell St. Paris, TN 38242 Phone: (731) 642-6672 **Union City**

106 Barham Rd. Union City, TN 38261 Phone: (731) 885-7060

Southern Premix, LLC

1700 S. Third St. Memphis, TN 38109 Primary Contact: Nick May Phone: (901) 708-2955 Fax: (901) 708-2955 www.southernpremix.com Products/Services: We Are A Volumetric Ready Mix Producer Based In Memphis.

Superior Walls of East TN

10144 Sparta Hwy Rock Island, TN 38581 Primary Contact: Stacey Harvey Phone: (931) 686-3240 Fax: (931) 686-8001 www.superiorwalls.com Products/Services: Superior Walls Precast Concrete Basement Walls (Design, Production, Installation, Service/ Warranty) Precast Concrete Products

Transit-Mix Concrete Co.

PO Box 1275 Johnson City, TN 37605 Primary Contact: Ernie Walker Phone: (423) 928-2128 Fax: (423) 926-7867 www.tmix.com Products/Services: Ready Mixed Concrete, Stone Slinger Services, Concrete Building Products, ICF Distributor, Retaining Wall Blocks

Ready Mixed Concrete Producer Members

Tri-County Concrete Products

100 Eaton St.
Parsons, TN 38363
Primary Contact: Justin Pearcy
Phone: (731) 847-6670
Fax: (731) 847-6671
"Like Us On Facebook"
Product/Services: Ready Mixed
Concrete Services, Septic Tanks,
Pipe, Rebar, Wire, Masonry
Supplies

Tri-State Ready Mix

PO Box 1206 Olive Branch, MS 38654 Primary Contact: Josh Evans Phone: (901) 396-8900 Fax: (901) 396-8879 www.tristatereadymix.com Products/Services: Ready Mix Concrete Producer, Ready Mix Concrete Supplier Additional Information:

Cordova

1323 Rebel Rd. Cordova, TN *Phone:* (901) 396-8900

Twin K Enterprises, LLC

13271 Scott Highway Helenwood, TN 37755 Primary Contact: Kelley Krahn Phone: (423) 569-2049 Fax: (423) 569-4084 Products/Services: Ready Mix Concrete, Septic Tanks, Rock & Sand, Deliveries, Rebar & Supplies Additional Information:

<u>Harriman</u>

348 Poland Hollow Rd. Harriman, TN *Phone:* (865) 234-7114

<u>Oneida</u>

16906 Alberta St. Oneida, TN

Phone: (423) 569-6341

VanHooseco Ready Mix

244 Blair Bend Dr.
Loudon, TN 37774

Primary Contact: Jeff VanHoose
Phone: (865) 458-3998

Fax: (865) 458-3494

www.vanhooseco.com
Products/Services: Roller
Compacted Concrete, Self
Consolidating Concrete,
Pervious Concrete, Precast
Products, Reinforced Concrete
Pipe, On Site Certified Lab.

Volunteer Concrete

PO Box 682423
Franklin, TN 37068
Primary Contact: Chad
Swallows
Phone: (931) 364-5900
Fax: (615) 435-3891
www.volunteerconcrete.com
Products/Services: Ready Mix
Producer, Concrete Pumping,
Stone Hauling, NRMCA
Certified

West TN Ready Mix

380 Pierce Rd.
Oakland, TN 38060
Primary Contact: Herron Odle
Phone: (901) 466-3030
Fax: (901) 466-3090
Products/Services: Ready Mix
Concrete Services

N = 1 & 3

Associate Members

ADMIXTURE

ADMIXUS

2923 Boones Creek Road Johnson City, TN 37615 Primary Contact: Bruce Prezzavento Phone: (423) 282-4242 x241 Fax: (423) 282-1450 www.admixus.com Products/Services: ADMIXUS ES, ADMIXUS LS, ADMIXUS AS, ADMIX RC

BASF Admixtures

23700 Chargin Blvd Cleveland, OH 44122 Primary Contact: Gary Fust Phone: (843) 325-6050 www.basf-admixtures.com Products/Services: Glenium Series of Admixtures, Green Sense Concrete, MasterFiber, x-seed Accelerator, MasterLife 300D Waterproofing Additional Information: Denny Lind (615) 390-4899 Drag Yarbro (901) 484-9190 Rickey Swancey (205) 966-3115 Jason Ford (423) 609-0235

CHRYSO, Inc.

1611 State Hwy 276 Rockwall, TX 75032 Primary Contact: Drew Carmichael Phone: (615) 631-5323 www.chrysoinc.com Products/Services: Admixture Supplier

EdenCrete Industries Inc.

7072 Parkbrook Lane

Cordova, TN 38018
Primary Contact: Brent
Sanders
Phone: (303) 468-1705
www.edencrete.com
Products/Services: Liquid
Admixtures
Additional Information: Brent
Sanders Southern Region Sales
Rep (470) 316-8114

Euclid Chemical Company

19215 Redwood Rd Cleveland, OH 44110 Primary Contact: Kyle Norwood Phone: (216) 531-9222 www.euclidchemical.com Products/Services: We provide concrete products such as fibers, sealers & chemical admixtures & integral colors.

GCP Applied Technologies

1722 Lake Egret Dr.
North Myrtle Beach, SC 29582
Primary Contact: Dan Meine
Phone: (678) 428-4224
Fax: (706) 654-2035
www.gcp.com
Products/Services: Full Line
of Chemical Admixtures for
Precast, Masonry & Ready
Mixed Concrete, Color & Fiber
Products for Ready Mixed
Concrete.
Additional Information: Zack

Additional Information: Zack Swanson - Technical Sales (410) 794-6973 zack.swanson@gcpat. com

Dan Meine - daniel.j.meine@gcpat.com

Sika Corporation

315 North Ebrite St Mesquite, TX 75149 Primary Contact: Chuck Beaty Phone: (501) 259-4317 Fax: (972) 289-5721 www.usa.sika.com Products/Services: Admixture Products & Applications

AGGREGATE

Lafarge Aggregates

810 Crescent Centre Dr. #180 Franklin, TN 37067 Primary Contact: Jeremy Cole Phone: (615) 771-1220 www.lafargeholcim.com Products/Services: Aggregates Additional Information: Joe Berlucchi Area Sales Manager (215) 287-4899 Jeremy Cole Territory Manager (901) 896-4422 Bobby Ehrhardt Inside Sales (615)955-3918

Pine Bluff Materials Co.

1030 Visco Drive

Nashville, TN 37210

Primary Contact: Mike
Bohleber

Phone: (615) 254-1956

Fax: (615) 254-1960

www.pbmat.com

Products/Services: Specification

Rogers Group Inc.

PO Box 25250

Sand, Gravel & Stone

Nashville, TN 37202

Primary Contact: Granville
Grant

Phone: (615) 613-1115

www.rogersgroupinc.com

Products/Services: Crushes
Stone and Natural Sand, &
Construction Services

Vulcan Materials Co.

115 East Park Dr. Suite 100 Brentwood, TN 37027 Primary Contact: Jon Badgett Phone: (615) 361-8550 Fax: (615) 399-0167 www.vulcanmaterials.com Products/Services: Crushed Stone & Sand

CEMENT

Buzzi Unicem USA, Inc.

Primary Contact: Dan Rinke Phone: (901) 682-8848 Fax: (901) 682-8852 www.buzziunicemusa.com Products/Services: Portland and Masonry Cement Additional Information: Ric Sutter, Sr.VP Sales Dan Rinke, Regional VP Sales (901)409-3775 Dwayne Stone, Market Mgr. Memphis (270)210-5217 Carl Kurzrock, Market Mgr. Nashville (615)351-6145 Hunter Wallace, Market Mgr. Chatt. & Knoxville (423)645-4046 Heath Rogers, Technical Services Memphis & Nashville (901)833-3647 Matt Wilbanks, Technical Services Chatt & Knoxville (901)413-9545

Cemex

PO Box 100813

Birmingham, AL 35210
Primary Contact: Lynn Rasco
Phone: (205) 967-5211
Fax: (205) 967-5266
www.cemexusa.com
Products/Services: Portland
Cement
Additional Information:
Knoxville Plant – Sales
Manager
Mickey Bradley (865) 567-7672
Nashville Terminal – Sales
Manager
Cody Eaton (615) 478-7594

Continental Cement Co.

370 Cobalt Bay Loop #101 Memphis, TN 38103 Primary Contact: Jon Harrell Phone: (901) 569-4645 www.continentalcement.com Products/Services: Cement Manufacturer Additional Information: Mike Gordan, VP Sales & Marketing (800) 625-1144 Terry Martin Terminal Mgr. (901) 525-0311

LafargeHolcim

810 Crescent Centre Dr. Suite
180
Franklin, TN 37067
Primary Contact: Benoit
Cotnoir
Phone: (615) 771-1220
Fax: (615) 771-1230
www.lafargeholcim.com
Products/Services: Portland
Cement, Slag, Masonry &
Oilwell Cement
Additional Information: Tim
Langelier (615) 330-1776
Ward Poston (615) 202-5696
Joey Deroe (870) 215-3420

7018

Lehigh Cement Co.

400 Riverhills Business Park Suite 437 Birmingham, AL 35242 Primary Contact: Phil Detwiler Phone: (205) 968-5803 Fax: (205) 969-1794 www.lehighcement.com Products/Services: Cement sales Additional Information: Tray Breitbarth (770)605-0854 Middle & East TN, Grady Gunn (205) 901-6105 West TN

National Cement Co. of Alabama

2000 Southbridge Pkwy.St600 Birmingham, AL 35209 Primary Contact: Scott East Phone: (205) 423-2600 Fax: (205) 870-5777 www.nationalcement.com Products/Services: Cement Products & Masonry Cement Products Additional Information: Stephen Snipes- VP Sales (205) 532-2368

FIBER

Durafiber, Inc.

714 West Main St. Suite 205 Murfreesboro, TN 37129 Primary Contact: Mike Deaton Phone: (615) 333-9883 Fax: (615) 333-9882 www.durafiber.com Products/Services: Ultrafiber 500, Polypropylene Fiber, Steel Fiber, Fritz Pak Products

Fibermesh

4019 Industry Dr. Chattanooga, TN 37421 Primary Contact: James Dowland Phone: (423) 855-1466 www.fibermesh.com Products/Services: Manufacturer of Synthetic Concrete Reinforcement Fibers

FLYASH

904 Raven Point

Boral Material Technologies

Canton, GA 30114
Primary Contact: Randy
Butcher
Phone: (470) 991-0885
Website: http://boralamerica.com
Products/Services: Fly Ash
Marketer
Additional Information:
Bryan Strevel (615) 828-7332
East & Middle TN
Greg Thomas (501) 844-6607

The SEFA Group 217 Cedar Rd.

Lexington, SC 29073

West TN

Primary Contact: Bert Nunn Phone: (803) 520-9000 Fax: (803) 520-9001 Website: http://sefagroup.com Products/Services: Class F Fly Ash, Technical Services & Engineering Additional Information: Mark Casey Technical Sales & Service (865) 806-6950 Clark Gates Technical Sales &

Waste Management/ Fly Ash Direct

Service (615) 202-1001

5128 Grand Oak Way
Brentwood, TN 37027
Primary Contact: Bill Hunt
Phone: (615) 419-9151
Fax: (513) 871-1974
Website: www.flyashdirect.com
Products/Services: Dry Bulk Fly
Ash, TDOT Approved Class C
Additional Information:
Bill Hunt, Business
Development Mgr. (615) 4199151



At Lafarge, our commitment goes far beyond the raw materials we produce. We bring together the best solutions and materials to build more durable, compact and connected cities. And when you build better cities you get buildings, roads and infrastructure that truly reflect the changing needs of today's communities.

It's this kind of ongoing dedication that's an integral part of the Lafarge culture. And it shows. Whether it's our focus on safety, the well-being of our employees, or the satisfaction of our customers — it's all about ensuring a better quality of life for everyone involved.

To learn more about Lafarge solutions and products, including cement, concrete and aggregates, contact:

Tim Langelier, Middle TN Tim.Langelier@LaFargeHolcim.com

www.LaFargeHolcim.com

Benoit Cotnoir Area Sales Mgr. Southern Region



THE STATE OF THE S

 $\ensuremath{\texttt{©}}$ 2016 Lafarge North America Inc., Chicago, IL

LAFARGE

Affiliate Members

ARCHITECTS

Bauer-Askew Architects

1615 16th Ave. South Nashville, TN 37212 *Phone:* (615) 467-2796 www.baueraskewarchitecture.

com

Products/Services: Architectural

Services

BATCH PLANTS & EQUIPMENT

CEI Enterprises, Inc. An Astec Co.

245 Woodward Rd. SE Albuquerque, NM 87102 Primary Contact: Jim Johnson Phone: (423) 443-0877 Fax: (505) 243-1422 www.ceienterprises.com Products/Services: Manufacture & Service Concrete & Asphalt Plants, RCC Mixers, Precast Plants & Mixers, Dust Control Equip.

Command Alkon

1800 International Park Dr. St.#400
Birmingham, AL 35243
Primary Contact: Ed Rusch
Phone: (800) 624-1872
Fax: (205) 870-1405
www.commandalkon.com
Products/Services: Batching
Controls, Dispatching and
Accounting Software,
Production/Quality Control
Software and Performance
Management Software

Stephens Mfg Co. Inc.

PO Box 488
Tompkinsville, KY 42167
Primary Contact: Greg High
Phone: (270) 487-6774
Fax: (270) 487-8368
www.stephensmfg.com
Products/Services: Concrete
Plants, Dust Collectors,
Reclaimers, Material Handling
Systems & Mixers

Southern Concrete Machinery, LLC

PO Box 11098 Murfreesboro, TN 37129 Primary Contact: Chris Davenport Phone: (615) 957-4600 Products/Services: Con-E-Co Batch Plants, Pearson Hot Water & Chillers, ForTrans Ph Systems, BFK Reclaimers, Plant Parts & Load Out Terminals

Systems & Controls

1850 Old Hwy 95
Lenoir City, TN 37771
Primary Contact: Mark
McHenry
Phone: (865) 988-8583
Fax: (865) 988-0397
www.systemsandcontrols.com
Products/Services: Stephens
Concrete Plants & Parts, Batch
Computers & Dispatch Systems,
Badger Water Meters, Hydronix
Moisture Probes, Plant Scale
Certifications & Service

BUSINESS SERVICES

Resource Management Associates

PO Box 512
Forked River, NJ 8731
Primary Contact: Doug Ruhlin
Phone: (888) 762-0230
www.rmagreen.com
Products/Services: Concrete
Industry Specific Environmental
Training, NPDES Stormwater
Permitting, Phase 1 Env. Site
Assessments, Environmental
Audits, Env. Management
Systems

SmartDrive Systems

9450 Carroll Park Dr. San Diego, CA 92121 Primary Contact: Jeff Zola Phone: (858) 225-5550 www.smartdrive.net Products/Services: A Video Based Safety & Transportation Intelligence Program

CONCRETE PUMPING

Concrette Pump Partners

1309 Brown St.
Nashville, TN 37203
Primary Contact: Jon Kemp
Phone: (615) 299-9899
Fax: (615) 219-2154
www.pumppartners.com
Products/Services: Concrete
Pumping Services

CONSTRUCTION EQUIPMENT

Multivibe, Inc.

3125 N. Friendship Rd.
Paducah, KY 42001
Primary Contact: Carl Ellis
Phone: (270) 554-2615
Fax: (270) 554-0631
www.multivibe.com
Products/Services: Vibratory
Screeds (Gas & Electic), Wall
Vibrators, Roller Screeds

Power Rental & Sales

3653A Trousdale Dr.
Nashville, TN 37204
Primary Contact: Brent
Cornelius
Phone: (615) 837-1450
Fax: (615) 837-1452
Products/Services: Vertical
forms, Masonry Supplies, Power
Tools & Grinders

MATERIAL SUPPLIERS

Butterfield Color Co.

625 W. Illinois Ave.
Aurora, IL 60506
Primary Contact: Marshall
Hoskins
Phone: (630) 906-1980
Fax: (630) 906-1982
www.butterfield.com
Products/Services: Decorative
Concrete Products, Integral
Color, Stamping Tools, Training,
Stains, Overlays

Clemons Concrete Coatings

505 Cave Rd.
Nashville, TN 37210
Primary Contact: Don Ware
Phone: (615) 872-9099
Fax: (615) 872-9052
www.ccc-usa.com
Products/Services: Sealers,
Retarders, Curing Compounds,
Stains, and Form Release

Sicalco, Ltd.

522 Chestnut St. Suite GB Hinsdale, IL 60521 Primary Contact: Kevin Casto Phone: (312) 404-9207 www.sicalco.net Products/Services: Markerters of Liquidow(tm) Calcium Chloride

Solomon Colors/Brickform

4050 Color Plant Rd Springfield, IL 62702 Primary Contact: Todd Rose Phone: (217) 503-6126 Fax: (615) 739-8007 www.solomoncolors.com Products/Services: Colors for Concrete Liquid, Dry, & Granular, Decorative Concrete Stains, Stamps, Sealers, Ultrafiber

Spray-Lock Concrete Protection

5959 Shallowford Rd Suite 405 Chattanooga, TN 37421 Primary Contact: Lee Thrasher Phone: (423) 305-6151 Fax: (423) 305-6150 www.concreteprotection.com Products/Services: Spray Lock Concrete Protection strives to make concrete better by providing colloidal silica products that stabilize concrete PH & completely fill available pores & capillaries.

PRECAST

Bradley Tank & Pipe, LLC

PO Box 3146 Cleveland, TN 37328 Primary Contact: Eddie Johnson Phone: (423) 479-4482 Fax: (423) 476-4527 Products/Services: Redi-Rock Retaining Walls, Sanitary/Storm-Manholes, Utility Structures, Grease Interceptors & Water Quality Structures.

C.R. Barger & Sons, Inc.

123 Pawnook Farm Rd Lenoir City, TN 37771 Primary Contact: Eric Barger Phone: (865) 270-8080 Fax: (865) 270-8079 www.bargerandsons.com Products/Services: Retaining Wall Blocks, Manholes, Structures, Box Culverts, TDOT Certified & NPCA Certified Plant

Foley Products Co.

3950 Cromwell Rd Chattanooga, TN 37421 Primary Contact: David Clippinger Phone: (615) 724-6764 www.foleyproducts.com Products/Services: Precast Box & Round Structures, Drainage Products, Speciality Items

Gate Precast Co.

1 Bluegrass Drive Ashland City, TN 37015 Primary Contact: Jim Pearson Phone: (615) 792-4871 Fax: (615) 792-7608 www.gateprecast.com Products/Services: Precast Concrete Systems, Wall Panel, Column Covers & Spandralls

Jarrett Concrete Products Inc.

2012 Hwy 12 S Ashland City, TN 37015 Primary Contact: Robert Jarrett Phone: (615) 792-9337 Fax: (615) 792-9071 www.jarrettconcreteproducts. com

Products/Services: Precast

Concrete Structures

Ross Prestress Concrete, Inc.

PO Box 6299
Knoxville, TN 37914
Primary Contact: David Miller
Phone: (865) 524-1485
Fax: (865) 637-0831
www.rossprestress.com
Products/Services: Precast &
Prestressed Concrete Members,
Hollowcore Plank

TRUCKING

Bulk First LLC

3515 Linda Lane Louisville, KY 40211 Primary Contact: Dewell Gossett Phone: (502) 447-8700 Fax: (502) 447-2555 www.bulkfirst.com Products/Services: A Trucking Company Hauling Portland Cement & Flyash

TRUCKS & EQUIPMENT

Con-Tech Mfg.,Inc.

67079 170th Ave.
Dodge Center, MN 55927
Primary Contact: Dean
Bungum
Phone: (507) 206-8998
Fax: (507) 374-2548
www.ctmmixers.com
Products/Services:
Manufacturing Concrete Truck
Mixers Sales & Parts

McNeilus Truck

PO Box 367 Villa Rica, GA 30180 Primary Contact: Brad Towler Phone: (770) 459-5151 Fax: (770) 459-0068 www.mcneiluscompanies.com Products/Services: Distributor for Trucks and Mixers, Designed for Production & Safety

Terex Advance Mixer

7727 Freedom Way
Fort Wayne, IN 46898
Primary Contact: Scott Kutz
Phone: (330) 204-1079
Fax: (260) 969-4528
www.terex.com
Products/Services: Front
Discharge Ready Mix Trucks,
Complete Parts & Field Service
Network

Engineers/Testing Labs

ACOT Associates Group

5796 Shelby Oaks Dr Suite 16A Memphis, TN 38134 Primary Contact: Dan Akinduro Phone: (901) 266-1653 Fax: (901) 373-8222 www.acot.us.com Products/Services: Design, Build & Engineering Services

Anderson Engineering Consultants, Inc

10205 Rockwood Rd. Little Rock, AR 72204 Phone: (501) 455-4545 www.aecigeo.com Products/Services: Construction Materials Testing

ATC Group Services

2690 Memorial Dr. Suite D Murfreesboro, TN 37129 Primary Contact: Tim Thomson Phone: (615) 546-6946 www.atcgroupservices.com Products/Services: Concrete Acceptance Testing/QA, QC, Soil Mechanics, Geotechnical Investigation, Full Lab for Construction Materials Testing

Bacon Farmer Workman Eng.&Testing

PO Box 120

Paducah, KY 42002

Primary Contact: Mark

Workman

Phone: (270) 443-1995

Fax: (270) 443-1904

www.bfwengineers.com

Products/Services: Construction

Materials Testing, Inspections,

Civil, Structural, Transportation

& Surveying

Barge Design Solutions

615 3rd Ave. South Suite 700
Nashville, TN 37210
Primary Contact: Raymond
Canady
Phone: (615) 254-1500
Fax: (615) 255-6572
www.bargedesign.com
Products/Services: Architectural
& Engineering Services,
Surveying & Construction
Inspection

Building & Earth Sciences, Inc.

5545 Derby Dr.
Birmingham, AL 35210
Primary Contact: Trace Higgins
Phone: (205) 836-6300
Fax: (205) 836-9007
www.buildingandearth.com
Products/Services: Geotechnical
Engineering Services, CMT &
Special Inspections

Collier Engineering

5560 Franklin Pike Circle Brentwood, TN 37027 Primary Contact: Hayden Bilyeu Phone: (615) 331-1441 Fax: (615) 331-1050 www.collierengineering.com Products/Services: Consulting Engineering, Geotechnical Engineering & Materials Inspection

Construction Mat.Lab/ DBA, Inc.

PO Box 9449
Knoxville, TN 37920
Primary Contact: Scott
Fitzgerald
Phone: (865) 573-6122
Fax: (865) 573-1817
www.cmllabtechs.com
Products/Services: Geotechnical
Drilling & Rock Coring,
Construction Materials Testing,
Concrete Testing, QA/QC Fill
Placement & Density Testing,
AMRL Accredited

Earth Science Engineering, LLC

201 W. Dunbar Cave Rd. Clarksville, TN 37040 Primary Contact: Chris Casteel Phone: (931) 645-8008 Fax: (931) 645-0180 www.eseng.us Products/Services: Engineering Services, Drilling & Sampling, Testing, Special Inspections & Environmental Consulting

ECS Southeast, LLP

318 Seaboard Lane Suite 208
Franklin, TN 37067
Primary Contact: Mark Luskin
Phone: (615) 885-4983
Fax: (615) 885-2311
www.ecslimited.com
Products/Services: Engineering
Consulting and Testing for
Construction Materials,
Geotechnical & Environmental,
Concrete Coring

Engineering & Testing Solutions

PO Box 6212 Sevierville, TN 37864 Primary Contact: Michael Whaley Phone: (865) 428-4468 Fax: (865) 932-3009 www.ets-tn.com Products/Services: Geotechnical & Constructions Materials Testing, Retaining Wall Design, Laboratory Testing & Drilling

GEOServices, LLC

2561 Willow Point Way Knoxville, TN 37931 Primary Contact: Josh Eslinger Phone: (865) 539-8242 Fax: (865) 539-8252 www.tennesseegeotechnical engineering.com Products/Services: Geotechnical, Construction Materials, Natural Resources Engineering

Geotechnology Inc.

3312 Winbrook Dr.
Memphis, TN 38116
Primary Contact: Justin
Donovan
Phone: (901) 353-1981
Fax: (901) 353-2248
www.geotechnology.com
Products/Services: Engineering
Services, Construction Materials
Testing & Special Inspections

Geotek Engineering Co.

2909 Elizabeth St.
Nashville, TN 37211
Primary Contact: Rami Mishu
Phone: (615) 833-3800
Fax: (615) 833-4097
www.geotektn.com
Products/Services: Geotechnical
Engineering and Construction
Materials Testing

Goodwyn, Mills & Cawood, Inc. 3310 West End Ave. Suite 420

Nashville, TN 37203

Primary Contact: Patrick
O'leary
Phone: (615) 333-7200

Fax: (615) 333-0529

www.gmcnetwork.com
Products/Services: Geotechnical,
Architecture, Engineering,
Environmental, Transportation

Intertek-PSI Inc.

751 South 5th St.
Nashville, TN 37206
Primary Contact: Ted
Kisselovich
Phone: (615) 244-8990
Fax: (615) 242-1618
www.psiusa.com
Products/Services: ASHHTO
Certified Laboratory, ARML
(ASTM E329), ACI, ASNT,
CWI

K.S. Ware & Associates LLC

54 Lindsley Ave.
Nashville, TN 37210
Primary Contact: Julie
Oliphant
Phone: (615) 255-9702
Fax: (615) 256-5873
www.kswarellc.com
Products/Services: Concrete,
Asphalt, and Aggregate Testing

Patriot Eng & Environmental, Inc.

6150 East 75th St Indianapolis, IN 46250 Primary Contact: Andy Ferris Phone: (615) 528-4441 Fax: (615) 528-5300 www.patrioteng.com Products/Services: Construction Materials Testing, Geotechnical Engineering, Environmental, USACE Validated, AASHTO, AMRL, CCRL

Professional Engineers, Inc.

PO Box 31343 Knoxville, TN 37930 Primary Contact: David Berry Phone: (865) 690-8262 Fax: (423) 690-4473 Products/Services: Field & Laboratory Testing of Concrete, Grout & Mortar

Ragan-Smith Associates, Inc.

PO Box 60070
Nashville, TN 38206
Primary Contact: Kenny Freer
Phone: (615) 244-8591
Fax: (615) 244-6739
www.ragansmith.com
Products/Services:
Transportation Engineering,
Civil Eng., Surverying,
Landscape Architecture &
Construction Services

Ross Bryan Associates,Inc.

227 French Landing Dr. Suite 500 Nashville, TN 37228 Primary Contact: Michael Paris Phone: (615) 329-1300 Fax: (615) 327-4446 www.rossbryan.com Products/Services: Structural Engineering

S&H Group, LLC

2737 Larmon Dr.
Nashville, TN 37204
Primary Contact: Chip
Howorth
Phone: (615) 645-1560
www.shgroupllc.com
Products/Services: Construction
Materials Testing, Subsurface
Explorations, Civil Site Design,
Stormwater Retention Design,
Foundation Design

S&ME, Inc.

1413 Topside Road Louisville, TN 37777 Primary Contact: John Pearson Phone: (865) 970-0003 Fax: (865) 970-2312 www.smeinc.com Products/Services: Concrete Testing, Soil & Rock Testing, Aggregate Testing, Construction Monitoring Services, Geotechnical Engineering

Shield Engineering

300 Forestal Dr. Knoxville, TN 37918 Primary Contact: Ray Tant Phone: (865) 544-5959 Fax: (865) 544-5885 www.shieldengineering.com Products/Services: Engineering Consulting & Materials Testing

Smith Seckman Reid, Inc.

2995 Sidco Dr.
Nashville, TN 37204
Primary Contact: Steve Lane
Phone: (615) 383-1113
Fax: (615) 386-8469
www.ssr-inc.com
Products/Services: Engineering
Services to Private & Public
Entities, Pervious Certified

Terracon Consultants, Inc.

5217 Linbar Drive Suite 309 Nashville, TN 37211 Primary Contact: Nick Fuller Phone: (615) 333-6444 Fax: (615) 333-6443 www.terracon.com Products/Services: Construction Materials, Environmental, Geo-technical Engineering, Engineering & Consulting Services

Terra-Nova Engineering

170-D East Main St. #124
Hendersonville, TN 37075
Primary Contact: Dan
Terranova
Phone: (615) 509-6012
www.terranova-engineering.com
Products/Services: Provide
Geotechnical & Construction
Materials Testing, Monitor
Concrete Testing, Fill Placement
& Density Testing & Steel
Inspection

Thompson Engineering, Inc.

630 Chestnut St.

Chattanooga, TN 37402

Primary Contact: Randy Brown Phone: (423) 756-7970 Fax: (423) 756-7950 www.thompsonengineering.com Products/Services: Consulting, Inspection, Geotech, Materials Testing, Survey & Design

TTL, Inc.

5010 Linbar Drive Suite 153 Nashville, TN 37211 *Primary Contact:* Martin Medley

Phone: (615) 331-7770 *Fax*: (615) 331-7771 www.ttlinc.com

Products/Services: Geotechnical Engineering, Construction and Material Testing, Environmental Testing, Civil Design & Surveying

Wood Enviornmental & Infrastructure Solutions,Inc.

3800 Ezell Rd. Ste 100 Nashville, TN 37211 *Primary Contact:* Justin Farmer

Phone: (615) 333-0630 www.amecfw.com

Products/Services: Engineering Services

Volkert Inc.

1428 Chestnut St.
Chattanooga, TN 37402
Primary Contact: Jim Floyd
Phone: (423) 842-3335
Fax: (423) 842-8630
www.volkert.com
Products/Services: Engineering,
Surverying and Construction
Engineering and Inspection
(CEI)



Contractor Members

Advantage Const. Services

1208 Hwy 47 E Dickson, TN 37055 Primary Contact: Trent Smith Phone: (615) 740-8777 Fax: (615) 441-8776 www.advantageconst.net Products/Services: Construction Services

American Constructors, Inc.

PO Box 120129 Nashville, TN 37212 Primary Contact: John Madole Phone: (615) 329-0123 Fax: (615) 320-7966 www.amconst.com Products/Services: Construction Manager/General Contractor

Aubrey Black Construction 232 Morgan Rd

Trenton, GA 30752

Primary Contact: Aubrey
Black

Phone: (706) 398-3247

Fax: (706) 553-4609

www.abcincrete.com

Products/Services: Stamped

Concrete, Spray-Deck, Stamped

Concrete Overlay, Acid Staining,
Increte Sytems

Baker's Construction Services, Inc.

PO Box 417 Piney Flats, TN 37686 Primary Contact: Kevin Buck Phone: (423) 538-4400 Fax: (423) 538-1165 www.contactbcs.com Products/Services: Site Construction, Utilities, Site Concrete, Curb& Gutter, Site Construction Oversight

Baltz & Sons Concrete

10505 US Hwy 64 Suite 1 Arlington, TN 38002 Primary Contact: Kevin Baltz Phone: (901) 465-4337 www.baltzconcrete.com Products/Services: Decorative & Stamped Concrete, Pervious Concrete, Patios, Driveways, Pool Decks

Beech Construction

541B Huntley Industrial Dr.

Smyrna, TN 37167

Primary Contact: Camden
Griffin

Phone: (615) 220-5335

Fax: (615) 220-9775

www.beech-construction.com

Products/Services: General
Contracting, Concrete
Contracting, Structural Concrete
& Pervious Concrete

Bell & Associates

PO Box 363 Brentwood, TN 37024 Primary Contact: Darek Bell Phone: (615) 373-4343 Fax: (615) 370-9887 www.balp.com Products/Services: Tilt-up, General Contracting, Bridges, Parking Garages

Black Construction, LLC.

PO Box 4051 Cleveland, TN 37320 Primary Contact: Sherrill Black Phone: (423) 476-7278 Fax: (423) 339-0549 Products/Services: Industrial & Commercial Concrete, Excavate, Flatwork, TDOT Curbing, & Walls

Blount Contractors, Inc.

3025 Northpark Blvd. Alcoa, TN 37701 Primary Contact: William Hall Phone: (865) 981-9090 Fax: (865) 981-9096 www.blountcontractors.com Products/Services: Full Service Concrete Contractor

Brindley Construction

PO Box 303 Pulaski, TN 38478 Primary Contact: Kathy Pigg Phone: (931) 363-4544 Fax: (931) 363-1503 www.brindleyconst.com Products/Services: Concrete Installer

BurWil Construction Co.

PO Box 637 Bristol, TN 37621 Primary Contact: Nick Self Phone: (423) 968-4158 Fax: (423) 968-3199 www.burwil.com Products/Services: Concrete Services

Charles Goar Concrete

1673 Newport Place LaVergne, TN 37086 Primary Contact: Charles Goar Phone: (615) 459-9003 Products/Services: Form carpentry, Pour in Place, Commercial & TDOT Roadwork

Charles Watkins & Co.

1706 Industrial Loop Rd Pulaski, TN 38478 Primary Contact: Charles Z. Watkins Phone: (931) 309-2039 Products/Services: ACI Certified, Retaining Walls, Box Culverts, Span Bridges, Pipe In Walls & Flatwork

Charter Construction Inc.

PO Box 90970 Nashville, TN 37209 Primary Contact: Turner Talley Phone: (615) 383-8464 Fax: (615) 292-6575 www.charterconstructioin.com Products/Services: Concrete Subcontractor, Tilt-Up & Commercial

Dempster Poured Foundations

PO Box 11331

Knoxville, TN 37939

Primary Contact: Ross

Dempster

Phone: (865) 755-0869

www.

dempsterpouredfoundations.com

Products/Services: Poured In

Place Walls

Denham-Blythe Co.,Inc.

855 Springfield Hwy Suite 101 Goodlettsville, TN 37027 Primary Contact: Vance Hohn Phone: (615) 855-2244 Fax: (615) 855-2249 www.denhamblythe.com Products/Services: Design-Build Building Construction Services to Industrial, Institutional & Commercial Facilities

Dusty & Sons Concrete, LLC

2478 Greens Mill Rd.
Columbia, TN 38401
Primary Contact: Josh Cornwall
Phone: (615) 473-0123
www.dustyandsonsconcrete.com
Products/Services: Poured
Concrete Walls, Stamping &
Staining Decorative Concrete,
Driveways, Slabs, Flatwork &
Pervious

Fulks Concrete Contractors, Inc.

79 Bettye Lane Tullahoma, TN 37388 Primary Contact: Donnie Fulks Phone: (931) 455-1160 Fax: (931) 455-1174 Products/Services: Residential, Commercial & Industrial Concrete, Concrete Curbing

Fulmer Concrete Finishing Co. Inc.

4845 Geminus Dr.
Chattanooga, TN 37416
Primary Contact: Andrew Faw
Phone: (423) 855-1551
Fax: (423) 893-9949
www.fulmerconcrete.com
Products/Services: Commercial
& Industrial Concrete
Contractor, Elevated Structures,
Concrete Walls, Foundations &
Slabs

Glenn E. Mitchell & Co., Inc.

3583 Louisville Road Louisville, TN 37777 Primary Contact: Andy Mitchell Phone: (865) 588-5135 Fax: (865) 588-5013 www.gemitchellco.com Products/Services: Foundations, Formed Walls, Fine Grading, Laser-Screeding, Place & Finish Slabs, Structural Concrete, Pervious & Tilt Walls

Hawkins Asphalt Paving, LLC

PO Box 292 Wartrace, TN 37183 Primary Contact: Chris Hawkins Phone: (931) 389-9671 Fax: (931) 389-9775 www.hawkinspaving.com

Contractor Members

Products/Services: Paving of City Streets, Curbing, Excavation, Driveways & Pervious Concrete

HR Concrete Solutions, LLC

9213 Pine Brook Dr. Knoxville, TN 37922 Primary Contact: Jimbo Reeves Phone: (865) 335-2346 www.hrconcreteco.com Products/Services: CIP Concrete, Decorative Concrete, Footings & Foundations, Flatwork, All Concrete **Applications**

JAY-TON Construction Co.

PO Box 142 Burlison, TN 38015 Primary Contact: Chase Sellers Phone: (901) 476-1487 Fax: (901) 476-5629 www.jay-ton.com Products/Services: Commercial Concrete Placement for Manufacturing, Energy Facilities, Distribution Centers & Warehouses

Jenkins & Jenkins, Inc.

162 West Swan Centerville, TN 37033 Primary Contact: Michael Jenkins Phone: (931) 215-9115 Fax: (931) 729-9320 Products/Services: Concrete Bridges, Bank Stabilization, Low Water Slabs, Box Culverts & Chert Delivered

Jinks Concrete Contractors Inc.

184 Roy Rd Sweetwater, TN 37874 Primary Contact: JoAnna Jinks Phone: (423) 337-0073 www.jinksconcrete.com Products/Services: Concrete Finishers, Pervious Concrete, Decorative Concrete, Curbs, Retaining Walls

L.E. Myers Co.

401 Chestnut Street Suite 120 Chattanooga, TN 37402 Primary Contact: Tod Cooper Phone: (423) 265-4441 Fax: (423) 265-6649 www.lemyers.com

Products/Services: Place Foundations for Substations & Transmission Line Projects

Lampley Construction Inc.

PO Box 696 Fairview, TN 37062 Primary Contact: Leonard Lampley Phone: (615) 799-2088 Fax: (615) 799-7930 Products/Services: Concrete Services. Commercial & Residential

Lithko Contracting Inc.

5207 Linbar Drive Suite 712 Nashville, TN 37211 Primary Contact: Chris Dittman Phone: (615) 834-8773 Fax: (615) 837-9769 www.lithko.com Products/Services: Total Package Concrete Contractor

MarCor Construction, Inc.

922 Harpeth Valley Place Nashville, TN 37221 Primary Contact: Kyle Bowers Phone: (615) 673-9950 Fax: (615) 673-9995 www.marcorconstruction.com Products/Services: Concrete Curb & Gutters, Sidewalks, Pervious Concrete, & Misc Concrete Work

Mid-State Construction

9190 Bradford Hicks Dr. Livingston, TN 38570 Primary Contact: Nick Davis Phone: (931) 823-7345 Fax: (931) 823-7646 www.mid-stateconstruction.com Products/Services: Bridge Construction, Bridge Repair, Geothermal & Quarry Drilling

My Sons Concrete, LLC

6239 Burnt Knob Rd Murfreesboro, TN 37129 Primary Contact: Porfirio Alfaro Phone: (615) 462-7050 Fax: (615) 462-7050 Products/Services: Concrete Installer, Flatwork, Pervious, Residential, Commercial & Industrial

Nsite, Inc.

PO Box 150 Milan, TN 38358 Primary Contact: Bill Smith Phone: (731) 695-5663 Products/Services: Certified Pervious Installer, General Contractor, Specialize in Downtown Improvement **Projects**

Pavecoat, LLC

815 Cherokee Ave. Nashville, TN 37207 Primary Contact: Rodney Jordan Phone: (615) 401-7590 Fax: (615) 401-7592 www.pavecoatllc.com Products/Services: Paving, Striping, Seal Coating & Line Striping, Excavation/Grading, Drainage & Placing Concrete

Salvador Vega Concrete

Lebanon, TN 37087 Primary Contact: Tony Vega Phone: (615) 524-9159 Products/Services: Flatwork, Stamped, Curb & Gutter, Commercial & Residential Concrete

SMC Commercial LLC

Knoxville, TN 37920 Primary Contact: Jason Dunaway Phone: (865) 851-9236 Fax: (865) 622-6796 Products/Services: Concrete Services

810 E Gov. John Sevier Hwy

Southern Constructors, Inc

PO Box 9476 Knoxville, TN 37940 Primary Contact: Richard Huskey Phone: (865) 579-5351 Fax: (865) 579-4328 www.southernconstructorsinc. Products/Services: General Contractor Specializing in Infrastructure- Water & Wastewater Plants, Pump Stations, Bridge Repairs, Commercial & Industrial Bldgs

Stansell Electric Co. Inc.

860 Visco Dr. Nashville, TN 37210 Primary Contact: Brad Norris Phone: (615) 329-4944 www.stansellelectric.com Products/Services: Electrical Contractor, Street Lighting, Traffic Signals, ITS & Commercial Bldg. Work

Taylor's Concrete Service, Inc.

354 Link Rd Dover, TN 37058 Primary Contact: Samuel Taylor Phone: (931) 206-2046 Products/Services: Contractor Services, Foundations, Walls & Slabs

Turner Construction Co.

624 Grassmere Park #4 Nashville, TN 37211 Primary Contact: Rob Binford Phone: (615) 231-6300 Products/Services: International Commercial Construction Services,

Vintage Resurfacing

915 Dove Lane Murfreesboro, TN 37128 Primary Contact: Larry Pippin Phone: (615) 586-2790 Fax: (615) 471-1574 www.vintageresurfacing.com Products/Services: Decorative Concrete Services, Resurfacing, Polishing, Commercial & Residential

Walland Services, LLC

PO Box 295

Rockvale, TN 37153 Primary Contact: Tony Sutherland Phone: (615) 772-8212 Products/Services: Construction Company Specializing In Water & Sewer Utilities & Concrete

NRMCA Pervious Certified Installers/Technicians

NAME	CITY	CERTIFICATION	EXP. DATE
Alan Sparkman	Nashville	Craftsman	8/28/20
Chris Hudson		Concrete Installer	
Thomas Rollins	Nashville	Concrete Installer	9/3/19
Porfirio Alfaro	Murfreesboro		2/12/23
Ross Armstrong	Lexington	Technician	4/13/22
Richard Balboa	Knoxville	Technician	9/21/20
Michael Baldoni	Franklin	Technician	6/12/21
Paul R. Barber	Murfreesboro	Technician	4/13/22
Richard Bastien	Knoxville	Technician	9/21/20
Adam Bennett	Goodlettsville	Technician	9/3/19
Hayden D. Bilyeu	Brentwood	Technician	8/10/22
Bill Blackman	Knoxville	Technician	5/7/20
Tony Bruster	Christiana	Technician	7/10/23
Todd L. Butler	Knoxville	Technician	9/21/20
Jonathan M. Cantrell	Nashville	Technician	10/3/18
Stephanie Carlson	Oak Ridge	Technician	5/7/20
Chandan Chaudhuri	Antioch	Technician	4/13/22
Larry Cook	Pulaski	Technician	12/3/20
James R. Corley	Nashville	Technician	10/3/18
Tony D. Crass	Murfreesboro	Technician	6/12/21
Camden Griffin	Smyrna	Technician	1/22/23
Brad Hall	Knoxville	Technician	5/7/20
Kevin Hall	Knoxville	Technician	9/21/20
Paul K. Haney	Murfreesboro	Technician	4/13/22
Greg Harris	Knoxville	Technician	5/7/20
Zackary Harris	Hermitage	Technician	7/10/23
Heath Haun	Knoxville	Technician	5/7/20
Chris Hawkins	Wartrace	Technician	1/28/20
James Hawkins	Maryville	Technician	5/7/20
John Kevin Haynes	Nashville	Technician	10/3/18
Timothy Horton	Knoxville	Technician	9/21/20
Bret Henry Howell	Chatanooga	Technician	12/3/20
Dennis Irwin	Knoxville	Technician	5/7/20
Jacob Jinks	Sweetwater	Technician	5/7/20
Jay Jinks	Sweetwater	Technician	5/7/20
Charles Kilpatrick	Hermitage	Technician	8/10/22
Darryl Kobeck	Summertown	Technician	9/3/19
Kenneth Lovelace	Seymour	Technician	4/13/22

Joel MarquezNashvilleTechnician1/9/1Ronnie McClureMadisonTechnician4/5/2Eric McElroyNashvilleTechnician9/3/1Mike McGaughKnoxvilleTechnician9/21/2	
Eric McElroy Nashville Technician 9/3/1	1
Mike McGaugh Knoxville Technician 9/21/2	9
	C
Dustin Mumaw Nashville Technician 10/3/1	3
Jeff Owens Louisville Technician 11/13/1	9
Ricky Peterson Knoxville Technician 9/21/2	C
Glen D. Rager Gallatin Technician 9/3/1	9
Shannon Sayne Knoxville Technician 5/7/2	C
Randy L. Simmons Shelbyville Technician 1/28/2	C
Justin Smithson Goodlettsville Technician 1/28/2	C
Terry Snelling Knoxville Technician 9/21/2	C
Joshua Stone Nashville Technician 7/10/2	3
Cory Tippens Harriman Technician 12/3/2	C
Kyle Tortorelli Nashville Technician 8/10/2	2
Dennie Underwood Corryton Technician 2/12/2	3
Gary S. Vincent Nashville Technician 10/3/1	3
Gregory Wallace Rockvale Technician 5/7/2	3
Hunter S. Whitten Nashville Technician 7/10/2	3
Celecita Williams Murfreesboro Technician 11/13/1)
Jie Xu Murfreesboro Technician 8/26/2)



American Concrete Institute

Always advancing

To verify an individual's ACI Certifications, visit:

http://bit.ly/2adlqlf

Placing Pervious Concrete

Pervious Concrete Allows Rainwater to seep into the ground. It is instrumental in recharging groundwater and reducing storm water runoff.



Pervious is a Special Mix...

It Requires Special Tools to Place It

WILDCAT ROLLER SCREED



COMPLETE PERVIOUS PACKAGE

"The Wildcat Screed has become my preferred placement method because of it's lightweight, easy to use, and produces a great finish."

Sarah Egan TN Concrete Association NRMCA Certified Pervious Concrete Installer The Wildcat Roller Screed is the easiest to use on the market and the most economical. It is also an ideal tool for concrete sidewalks, walking trails and golf cart paths.

We welcome comparison to any other brands.

For More Info Call Toll Free 877-220-6652 www.multivibe.com

INTERNSHIP SPEED INTERVIEWING DAY

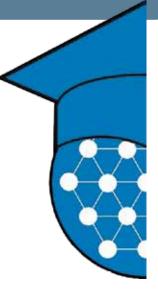
arly in February, CIM majors at MTSU put on their suits and printed their resumes, ready to meet with 19 companies that attended the Internship Speed Interviewing Day on campus. This unique event focuses on connecting students with employers for summer opportunities in concrete and construction. CIM majors interviewed for six minutes each with 19 employers from a variety of areas of the industry including ready mix, materials, precast, and contracting.



A view from above of students in the School of Concrete and Construction Management interviewing with companies on February 9 on the Murphy Center Track.



MTSU junior Caroline Blackstone of Winston, GA, responds to questions about her MTSU Concrete Industry Management experience from company representatives of Whiting-Turner.



ALUMNI SPOTLIGHT



Mark McCommon, Owner, Woodford Construction, Nashville, TN

What positions have you held in the industry?

Worked for a global design build firm (Lend Lease) that focused on military construction from 2006-2016. During the last four years I worked there I started a local construction company with my business partner (Michael Bouldin) who also graduated from the CIM program.

What has been your biggest challenge since graduation?

Keeping up with technology. It seems every day some type of new technology comes for our industry that blows me away. I think just keeping up with that to ensure I make myself and our company as efficient as possible.

What is your best memory from attending the CIM Program?

My best memory were all the relationships made along the way. I still stay in contact with a lot of the graduates from the program and actually have worked with a lot of them in one way or another over the past twelve years.

Were you involved in any organizations while attending CIM?

I was not that involved in outside programs while I was in school. I wish I had been because I can see now how it would have helped with networking and marketing yourself as a professional.

What do you wish you had known before graduating and entering the "real world"?

I think the biggest thing is being humble, but also being confident in yourself in what you have taken away from the CIM program and your own experiences to date. You obviously have a lot more to learn, but you also have a lot to bring to the table.

I still remember my first week out of school at my previous employer. We had gone out of town for a project review and there were about forty executives that had

flown in from all over the country and we were sitting in this large conference room at a hotel in Arizona. Having graduated two weeks before, I was the definitely greenest person in the room and had never sat in on a meeting like this before. It was pretty intimidating. They started discussing the project and reviewing what changes we should make going forward. I don't remember the exact subject, but we were stuck on this one topic for about ten minutes. I remember thinking to myself why we would do it this way and not that. I never asked the question because I thought "there is no way I am asking that in front of all these people", but then another ten minutes goes by and our CEO turns to me in front of everyone and asks what my thoughts were on it. I gave him what my thought were on it and he said that was the exact answer he was looking for and dint know why it had taken twenty minutes to come to a conclusion. I didn't know anything else they were really talking about that day, but I learned everyone brings something to the table.

Is there anything else that you would like to add?

I would say just make yourself as valuable as possible by being open to learning as much as possible. Just like in every industry, the market is booming right now, but there will be slow times and it's the individuals who set themselves apart during the good times that are still around during the slow times. This goes for working for a large company or working for yourself.

Info Link

Fall 2018 VOL. 32, NO. 2

Blalock Ready Mix	5
Chryso	7
Durafiber, Inc	31
imi	2
Lafarge North America	21
MMC Materials, Inc	5
Multi-Vibe	29
Sicalco, LTD	5
Southern Concrete	31
Systems & Controls	32
Vulcan Material	5

ALUMNI SPOTLIGHT



Richard Farmer, Technical Sales Manager, Nashville Ready Mix

What positions have you held in the industry?

Sales Rep with Gerdau Ameristeel; Project Manager with Cantera Concrete, Lithko Contracting, Wright Construction; to current role with NRM.

What do you like most about your position?

That every day present a different opportunity to do something new.

What is your best memory from attending the CIM Program?

Working the Booth at the World of Concrete.

What do you wish you had known before graduating and entering the "real world"?

It would have been beneficial to have taken Spanish classes.

What advice can you give current students?

Take advantage of any opportunity to live in new places with work and use the CIM program to help build relationships with other alumni.

Richard has joined the MTSU CIM Patron's Group and is giving back to the program. He plans to continue to help the growth of Nashville Ready Mix in the Middle Tennessee Region. In his personal life, he and his wife are raising their four year old daughter while promoting the benefits of working in construction and the roles of women in the industry.



"Serving the South Since 1943"

www.southernconcrete.com

Corporate Office: (731) 968-2537 P.O. Box 1090 • Lexington, TN 38351



Radio Dispatched GPS Trucks For Fast Dependable Service



Bolivar (731) 658-6105 Dyer (731) 692-3462 Humboldt (731) 784-5696 Henderson (731) 989-9723 Jackson (731) 422-3358 Lexington (731) 968-2537 Milan (731) 686-2288 Paris (731) 642-6672

"Building the South with top quality ready mix concrete & masonry products at a reasonable price."

Union City (731) 885-7060





705 Fort Negley Court Nashville, TN 37203

