



BACK ON TRACK

TCA's New Office and Lab Building to Provide A Strong Foundation for the Next Chapter of Service to Our Members



TN CONCRETE ASSOCIATION HEADQUARTERS





FORM-A-DRAIN®



contents

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Duane King 2021 TCA President

Member association benefits:

- network
- education
- solutions

Back on track and looking to nail down a start date for construction in late 2021 for TCA's new building.

MEMBERS
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BACK ON TRACK

s I write this column, TCA members are preparing to travel to the beach for the Summer Meeting with our friends and colleagues from Alabama. We missed this great opportunity to spend time with industry members last year, but we are looking forward to renewing connections, learning from our peers about the business of concrete, and, of course, a little beach time thrown-in for good measure.

Associations have always provided a place to network within an industry and many would say this is one of the most important services they provide to their members. These gatherings provide an opportunity to learn from others who are facing the same challenges and who may have found a solution that you can bring home to your company. Receiving just one good idea from a peer or a speaker can make the whole event profitable, as well as fun. We are all busy so making the time to attend can be tough, but the payoff is well worth the time.

TCA will be looking toward the future during my tenure as president. We are back on track to complete design and permitting for TCA's new office and lab building that will provide a strong foundation for TCA's next chapter of service to our members. We hope to nail down a start date for construction in late 2021, so stay tuned for more exciting updates on our new office.

Your Board will also be working to refresh our overall strategic plan during 2021. Meetings with friends and colleagues is just one thing that TCA does on behalf of all us, and we want to continue to focus our joint efforts on areas that bring value to our industry and to each member company.

If you have thoughts about our joint concrete future, I would appreciate hearing from you—please don't hesitate to reach out!

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Alan Spaykman

Alan Sparkman Executive Director

It's now official!
Tennessee set
a new record
for concrete
production in
2020.

The dynamic economy that we enjoy in the great state of Tennessee appears poised to continue the long run of growth we have seen since 2010.

DYNAMIC RECOVERY

t's now official! Tennessee set a new record for concrete production in 2020. The final numbers put our annual state production at 8.383 million cubic yards, surpassing the previous record levels of production set just before the onset of the Great Recession in 2006 and 2007. The year 2020 also marked the first time since the Great Recession that we surpassed the 8 million cubic yard mark, and our state's production of ready mixed concrete jumped 17% from 2019 levels. Overall concrete production in the US was up 1.7% from 2019 to 2020, so Tennessee's growth is far above average.

The dynamic economy that we enjoy in the great state of Tennessee appears poised to continue the long run of growth we have seen since 2010. Right now, our state is hitting on all cylinders from an economic point of view, and we continue to attract both investment and people to our state. This in-migration is fueling present growth and building jobs and opportunity that will support the next generation of Tennesseans. According to Market Graphics (our friend Edsel Charles), building permits for residential construction in the Tennessee markets he tracks are up over 27% in 2021 versus 2020 through the midpoint of the year (January - June). All of this is great news for the concrete industry as it points to strong and stable demand for our product in the foreseeable future.

All of this great news also brings with it some challenges. Those of us who have been around for a few business cycles have seen most of this before—rising materials prices, looming shortages of critical materials, likelihood of increasing regulatory burdens and a tight labor market. Some things are less familiar, foremost among them dealing

with a pandemic in addition to everything else, and I believe we are living through a permanent shift in the relationship between employers and employees.

This last one is now commonly referred to as Workforce and everyone is talking about Workforce. We had the Great Recession a little over a decade ago, and, today, we have the Great Resignation with a sizable number of employees leaving their current employers to look for what they consider a better opportunity.

According to the most recent NRMCA Driver Survey (2020), our industry continues to have a very high "churn" rate with new hires (mixer operators) each year roughly equal to the number of mixer operators leaving. The biggest reasons operators are leaving are higher pay elsewhere and inconsistent work schedules as a mixer operator. This is likely to get worse with the Great Resignation taking place in the economy as a whole.

Also of note to me in the 2020 Driver Survey was the number of operators who are retiring and a dramatic drop in the number of companies providing any kind of mentoring to new hires. The average age of mixer operators is now 47 years old, about 4 years older than the average of similar positions in all industries—this indicates that retirements are going to accelerate in the next few years. We already know from prior surveys that finding experienced mixer operators is very difficult and now we are seeing a huge drop in mentoring new drivers. I am concerned that these two trends will lead to a drop in the competency of mixer operators hauling our product from our plants to our customers.

TCA is actively working on Workforce to help our members address what is certain to be our biggest challenge in the decade of the 2020s. I invite your participation as we seek out solutions. ■



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A Preliminary Comparison of Portland Limestone Cement

With a Type I/II Portland Cement in Tennessee

INTRODUCTION AND LITERATURE REVIEW

Portland-limestone cement (PLC) has been used in the United States for several years, however, it is becoming more prevalent as of late (1). The first step in producing PLC is adding crushed, dried limestone to the grinding mill, along with portland cement clinker and gypsum. According to ASTM C150, ordinary portland cement (OPC) is limited to a maximum limestone content of 5% by mass. PLC, however, is defined by having a 5-15% limestone content by mass according to ASTM C595 (1, 2). This is an area of interest to lessen the environmental footprint that is becoming a concern for OPC production (1, 2).

Since the limestone is a softer material, it is generally more finely ground than the clinker that is produced. Limestone also requires less energy to grind due to its softness. PLC has a broader gradation, with a uniform distribution of the limestone particles, which results in better overall particle packing. The enhanced particle packing and uniform size distribution improves the PLC finish-ability and paste density (1, 3).

The strength of PLC concrete is affected by the amount of limestone substitution in the cement. It has been proven that the upper allowable limit of limestone substitution (15%), may potentially increase early-age strength resulting from the improved particle packing. The efficiency of supplementary cementitious materials (SCMs), such as fly ash and slag, can be increased with the use of PLC. The use of PLC with SCMs reduces the retardation effects of SCMs which in turn improves strength at all ages.

The fineness of the limestone plays a role in the workability of the concrete, but does not affect the water demand. Limestone generally contributes to the hydration reactions rather than being an inert filler (4). Therefore, PLCs can feasibly be used in the same situations as OPC (1).

About four percent of the world's Carbon Dioxide (CO₂) emissions are generated from producing portland cement (5). The average replacement of 10% limestone in PLC can result in around a 10% reduction in the CO₂ production as well as energy. The limestone that is used must contain a minimum of 70% Calcium Carbonate (CaCO₃) (3). CO₂ emissions from cement plants are caused by two main sources. These sources include calcination of the limestone and the consumption of fossil fuels to heat the raw materials to the required temperature to form clinker. With the substitution of 5% to 15% limestone by mass in PLC, this reduces the use of clinker. This in turn consumes less energy and reduces the CO₂ emissions and greenhouse gases. Overall, it has been proven that with the use of PLC, there can be a 12% improvement in environmental performance compared to OPC (6).

MATERIALS AND PROCEDURE

Table 1, column 1 shows the TDOT-approved materials for concrete that were used in this study, with the exception of the use of portland limestone cement (PLC) that was investigated. The proportions of the four mixtures used in this study (see Table 1) were determined through trial batching. After trialing, all four

TABLE 1. MIXTURES USED TO EVALUATE PLC

MATERIALS	CONTROL CLASS D	PLC CLASS D	CONTROL CLASS A	PLC CLASS A
Type I/II PC, (lbs/CY)	465	0	423	0
PLC, (lbs/CY)	0	465	0	423
Popular TN Class F Fly Ash, (lbs/CY)	155	155	141	141
No. 57 Stone, (SSD lbs/CY)	1849	1845	1747	1746
River Sand, (SSD lbs/CY)	1112	1109	1270	1266
Water (lbs/CY)	229.5	229.5	242.5	242.5
Design Percent Air	7	7	6	76
Air Entrainer, (oz/cwt)	2.77	3.81	2.48	2.85
Mid-Range Water Reducer (oz/cwt)	3.11	3.12	7.62	10.47
High-Range Water Reducer, (oz/cwt)	4.5	4.15	0	0

TABLE 2. COMPARISON OF PLC MIXTURES WITH TDOT CLASS D PCC REQUIREMENTS

PROPERTY	TDOT 604.03 CLASS D PCC REQUIREMENTS	CONTROL CLASS D	PLC CLASS D
Cement content (lbs/CY)	620 minimum 620		620
Water-cement ratio	0.40 max.	0.37	0.37
Percent Fine Aggregate by Total Aggregate Volume	44 maximum	38	38
Percent Class F Fly Ash Substitution (by weight) for PC	25 max.	25	25

TABLE 3. COMPARISON OF PLC MIXTURES WITH TDOT CLASS A PCC REQUIREMENTS

PROPERTY	TDOT 604.03 CLASS A PCC REQUIREMENTS	CONTROL CLASS A	PLC CLASS A		
Cement content (lbs/CY)	564 minimum 564		564		
Water-cement ratio	0.45 maximum	0.45 maximum 0.43			
Percent Fine Aggregate by Total Aggregate Volume	44 maximum	42.5	42.5		
Percent Class F Fly Ash Substitution (by weight) for PC	25 maximum	25	25		

TABLE 4. TESTING PROTOCOL FOR PLC EVALUATION MIXTURES

TEST METHOD	FREQUENCY	SPECIMENS		
Compressive Strength, AASHTO T22 (8)	3 @ 7, 14, 28 and 56 days	4 x 8 cylinders		
Static Modulus of Elasticity ASTM C 469 (9)	1 of 3 @ 28 and 56 days	4 x 8 cylinders		
Surface Resistivity, AASHTO T358 (10)	3 @ 7, 14, 28 and 56 days	56-day compressive strength 4 x 8 cylinders		
Hardened Concrete Absorption, ASTM C642 (11)	3 @ 56 days	3 x 6 cylinders		

mixtures met the indicated TDOT 604.03 (7) concrete plastic and hardened property requirements. Tables 2 and 3 show TDOT 604.03 (7) requirements for minimum cementing materials, w/cm ratio, fine aggregate percentage by total aggregate volume, and allowable SCM replacement percentages for TDOT Class D and A concrete, respectively. Six 0.85-cubic-foot batches of each mixture were made and tested as per Table 4 criteria.

RESULTS AND DATA QUALITY

Tables 5 and 6 show compressive strength results, result ranges, and allowable result ranges for the TDOT Class D and A mixtures, respectively. Tables 7 and 8 show static modulus of elasticity results, result ranges, and allowable result ranges for the TDOT Class D and A mixtures, respectively. Tables 9 and 10 show surface resistivity results, result ranges, and allowable result ranges for the TDOT Class D and A mixtures, respectively. Table 11 shows absorption after boiling results, result ranges, and coefficients of variation.

A Preliminary Comparison of Portland Limestone Cement

With a Type I/II Portland Cement in Tennessee

The acceptable range of the hardened property results was determined by obtaining the standard deviation or coefficient of variation from the appropriate test method and multiplying by an ASTM C670 factor for the number of test results (12). The multilaboratory precision was used for the 4x8-inch cylinder results. This was used since AASHTO T 358 states that the preparation of cylinders by different operators would increase the variation above multi-laboratory precision criteria (13). All hardened property test results met the acceptable precision criteria except the TDOT Class D and A PLC compressive strength at 7 days and the TDOT Class A control at 7, 14, and 28 days (indicated in red in Tables 5 and 6). Unfortunately, there is no precision criteria available for hardened concrete absorptions after boiling. However, the coefficient of variation's (COV) were determined for each mixture, and these results were lower than 10%, which was deemed acceptable. The hardened property results obtained seemed to be of sufficient quality on which to base reasonable conclusions.

ANALYSIS OF RESULTS

Statistical Comparison of Results

The tests of the hypotheses of equality of corresponding mean values of concrete properties across mixes are represented in Table 12 for the various mixtures at given curing times. A statistical t-test with the assumption of unequal variances was performed. The estimated t-value was observed to be less than the critical t-value at the corresponding degree of freedom with a five percent significance level. The compared mixes that were deemed to have statistically equal values were denoted as NSD (no significant difference) in Table 12. When the estimated t-value exceeded the critical t-value at the corresponding degree of freedom with five percent significance level, the compared mixes were deemed to have significantly different values. The green shaded cells in Table 12 indicate the PLC results are statistically significantly different and superior to the original portland cement (OPC) results.

TABLE 5. TDOT CLASS D COMPRESSIVE STRENGTH RESULTS AND DATA QUALITY (PSI)

MIXTURE	BATCH 1	BATCH 2	ватсн з	ВАТСН 4	BATCH 5	ватсн 6	MEAN	RANGE	ALLOWABLE RANGE
7-DAYS									
Control Class D	5500	5280	5780	5530	5730	5890	5618	610	719
PLC Class D	5790	6090	6010	5420	5330	6320	5827	990	746
14-DAYS									
Control Class D	6190	6190	6500	6090	6210	6470	6275	410	803
PLC Class D	6780	6840	6740	6280	6250	6440	6555	590	839
				28-D	AYS				
Control Class D	6780	6750	<i>7</i> 110	6750	7230	7240	6977	490	893
PLC Class D	7560	7600	7700	7030	6930	7500	7387	770	946
	56-DAYS								
Control Class D	7800	<i>7</i> 610	7890	<i>7</i> 630	7650	8200	7797	590	998
PLC Class D	8420	8780	8700	7970	8130	8500	8417	810	1077

TABLE 6. TDOT CLASS A COMPRESSIVE STRENGTH RESULTS AND DATA QUALITY (PSI)

MIXTURE	ВАТСН 1	ВАТСН 2	ватсн з	ВАТСН 4	ВАТСН 5	ватсн 6	MEAN	RANGE	ALLOWABLE RANGE
	7-DAYS								
Control Class A	3990	4250	4180	4260	4110	4720	4252	730	544
PLC Class A	4750	5430	5060	5340	4710	4860	5025	720	643
14-DAYS									
Control Class A	4650	4780	4490	4700	4460	5250	4722	<i>7</i> 90	604
PLC Class A	5840	5920	5900	5960	5590	5890	5850	370	749
				28-D/	YS				
Control Class A	5080	5080	5080	5120	5190	6030	5263	950	674
PLC Class A	6770	6870	6670	6830	6420	6590	6692	450	857
56-DAYS									
Control Class A	5880	5980	5910	5990	5970	6520	6042	640	773
PLC Class A	7320	7820	7850	7570	7080	7440	<i>7</i> 513	<i>7</i> 70	962

TABLE 7. TDOT CLASS D STATIC MODULUS OF ELASTICITY RESULTS AND DATA QUALITY (106-PSI)

MIXTURE	BATCH 1	ВАТСН 2	ватсн з	ВАТСН 4	ВАТСН 5	ватсн 6	MEAN	RANGE	ALLOWABLE RANGE
28-DAYS									
Control Class D	3.95	4.05	4.20	3.95	4.00	4.05	4.03	0.25	0.68
PLC Class D	4.25	4.35	4.25	4.35	4.10	4.35	4.28	0.25	0.73
				56-DA	AYS				
Control Class D	4.25	4.10	4.15	4.20	4.30	4.55	4.26	0.45	0.72
PLC Class D	4.40	4.40	4.50	4.25	4.35	4.25	4.37	0.25	0.74

TABLE 8. TDOT CLASS A STATIC MODULUS OF ELASTICITY RESULTS AND DATA QUALITY (106-PSI)

MIXTURE	ВАТСН 1	ВАТСН 2	ватсн з	ватсн 4	ВАТСН 5	ватсн 6	MEAN	RANGE	ALLOWABLE RANGE
28-DAYS									
Control Class A	3.60	3.75	3.55	3.55	3.60	3.90	3.66	0.35	0.62
PLC Class A	4.15	4.40	4.45	4.45	3.95	3.90	4.22	0.55	0.72
				56-DA	AYS				
Control Class A	4.30	3.85	4.10	3.90	3.95	4.15	4.04	0.45	0.68
PLC Class A	4.30	4.15	4.30	4.30	4.00	4.25	4.21	0.30	0.72

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Table 12 shows that in all 22 cases, or 100% of the time, PLC was superior or equal to the OPC. This would seem to be strong evidence that the PLC is as good if not better than OPC.

TDOT Specification Compliance

The 28-day compressive strength requirement for TDOT Class D concrete is 4000-psi. All compressive strength results shown in Table 5 exceed this specification at all ages. Similarly, all compressive strength results at all ages shown in Table 6 exceed the TDOT Class A specification for 28-day requirement of 3000-psi. There are no TDOT specifications for SR, static modulus of elasticity, or absorption for Class A or D concrete mixtures.

Material Cost

In order to compare costs between OPC and PLC, one would have to consider a number of variables. While PLC can cost less to manufacture due to the additional limestone, variables such as shipping methods and distances must be accounted for. Due to these ever changing variables, it is difficult to accurately estimate the costs. Ultimately, there should not be a significant cost difference.

NEED FOR FURTHER RESEARCH

The current project only compared one source of PLC. The only source of PLC currently in the state of Tennessee is located in Memphis. It seems prudent to make further comparisons with other PLC samples, possibly in other states. However, if the other PLC sources meet the same requirements as the sample used in this project, it seems reasonable to expect similar performance.

CONCLUSION

Based on the testing and statistical analysis done in this project, it appears that the PLC that was evaluated is equal to or superior in performance as a cementing material compared to OPC.

DISCLAIMER

The opinions expressed herein are those of the authors and not necessarily the opinions of the Tennessee Concrete Association (TCA).

TABLE 9. TDOT CLASS D SURFACE RESISTIVITY RESULTS AND DATA QUALITY (KILOHM-CM)

MIXTURE	BATCH 1	ВАТСН 2	ватсн з	ВАТСН 4	ватсн 5	ватсн 6	MEAN	RANGE	ALLOWABLE RANGE
	7-DAYS								
Control Class D	9.7	9.2	9.3	9.6	9.8	9.5	9.5	0.6	4.8
PLC Class D	11.6	11.6	11.4	11.0	11. <i>7</i>	12.2	11.6	1.2	5.8
14-DAYS									
Control Class D	10.9	10.4	10.6	11.2	11.0	10.8	10.8	0.8	5.4
PLC Class D	14.6	14.3	14.4	14.2	14.8	15.1	14.6	0.9	7.3
				28-D <i>A</i>	YS				
Control Class D	13.8	13.3	13.7	14.5	14.3	14.1	14.0	1.2	7.0
PLC Class D	21.1	21.0	20.2	20.6	23.0	23.3	21.5	3.1	10.8
	56-DAYS								
Control Class D	20.8	20.4	20.3	21.2	20.7	21.3	20.8	1.0	10.4
PLC Class D	39.4	38.8	39.6	38.9	39.6	39.4	39.3	0.8	19.6

TABLE 10. TDOT CLASS A SURFACE RESISTIVITY RESULTS AND DATA QUALITY (KILOHM-CM)

MIXTURE	ВАТСН 1	ВАТСН 2	ватсн з	ВАТСН 4	ВАТСН 5	ватсн 6	MEAN	RANGE	ALLOWABLE RANGE
7-DAYS									
Control Class A	8.6	8.3	8.5	8.5	7.7	8.2	8.3	0.9	4.2
PLC Class A	9.1	9.5	8.7	8.9	8.6	8.4	8.9	1.1	4.4
14-DAYS									
Control Class A	9.5	9.1	9.2	9.3	8.7	9.2	9.2	0.8	4.6
PLC Class A	11.3	11 <i>.7</i>	10.5	11.0	10.9	10.5	11.0	1.2	5.5
				28-D/	YS				
Control Class A	12.1	11. <i>7</i>	11.6	11.9	11.5	11.9	11.8	0.6	5.9
PLC Class A	16.6	16.9	15.7	16.0	15.9	15.5	16.1	1.4	8.1
56-DAYS									
Control Class A	19.3	19.0	18.6	18.8	18.4	20.0	19.0	1.6	9.5
PLC Class A	29.5	30.2	27.3	27.9	29.1	28.0	28.7	2.9	14.3

TABLE 11. 56-DAY ABSORPTION AFTER BOILING RESULTS, RANGES AND COEFFICIENTS OF VARIATION

MIXTURE	ватсн 1	ВАТСН 2	ватсн з	ВАТСН 4	ватсн 5	ватсн 6	MEAN	RANGE	cov%
Control Class D	4.09	4.21	4.32	4.37	4.58	4.45	4.34.	0.49	4.0
PLC Class D	4.50	4.69	4.42	4.41	4.58	4.33	4.49	0.36	2.9
Control Class A	4.78	4.91	4.78	4.82	4.73	4.41	4.74	0.50	3.6
PLC Class A	4.58	4.69	5.14	5.03	5.06	5.21	4.95	0.63	5.2

TABLE 12. STATISTICAL ANALYSIS COMPARING PLC VS. OPC

COMPONENT	PLC CLASS D CONCRETE VS. OPC CLASS D CONCRETE	PLC CLASS A CONCRETE VS. OPC CLASS A CONCRETE
Surface Resistivity @ 7 days	Superior	Superior
Surface Resistivity @ 14 days	Superior	Superior
Surface Resistivity @ 28 days	Superior	Superior
Surface Resistivity @ 56 days	Superior	Superior
Compressive Strength @ 7 days	NSD	Superior
Compressive Strength @ 14 days	NSD	Superior
Compressive Strength @ 28 days	Superior	Superior
Compressive Strength @ 56 days	Superior	Superior
Static Modulus of Elasticity @ 28 days	Superior	Superior
Static Modulus of Elasticity @ 56 days	NSD	NSD
Absorption after Boiling	NSD	NSD

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REFERENCES

- 1. Goguen, Claude. "Portland-Limestone Cement." *National Precast Concrete Association*, Precast Inc. Magazine, 2 June 2014, precast.org/2014/06/portland-limestone-cement/.
- "The Advantages of Portland-Limestone Cement." Concreteconstruction.net, Concrete Production & Precast, 12 Aug. 2014, www.concreteconstruction.net/concrete-productionprecast/the-advantages-of-portland-limestone-cement o.
- MCC Research Committee. "LITERATURE REVIEW PORTLAND-LIMESTONE CEMENT." Mnconcretecouncil.com, Aug. 2013, mnconcretecouncil.com/index.php/ download file/view/251/325.
- Tsivilis, S., et al. "A Study on the Parameters Affecting the Properties of Portland Limestone Cements." *Cement and Concrete Composites*, vol. 21, no. 2, 1999, pp. 107–116., doi:10.1016/s0958-9465(98)00031-6.
- Robbie M. Andrew. "Global CO₂ Emissions from Cement Production." *Earth System Science Data*, vol. 10, no. 1, 2018, pp. 195–217, DOI: 10.5194/essd-10-195-2018.
- Pearson, Candace. "Switching to Portland Limestone Cement Could Reduce Emissions." *BuildingGreen*, BuildingGreen, 2 Apr. 2014, www.buildinggreen.com/newsbrief/switchingportland-limestone-cement-could-reduce-emissions.
- Tennessee Department of Transportation, Standard Specifications for Road and Bridge Construction (Section 604.03), January 1, 2015.
- AASHTO T 22-10(2011)¹. "Standard Method of Test for Compressive Strength of Cylindrical Concrete Specimens", American Association of State Highway and Transportation Officials. Standard Specifications for Transportation Materials and Methods of Sampling and Testing Part 2A, 33rd Edition 2013.
- ASTM Standard C469, 2014, "Standard Test Method for Static Modulus of Elasticity and Poisson's Ratio of Concrete in Compression," ASTM International, West Conshohocken, PA, 2014, DOI: 10.1520/C0469_C0469M-14, www.astm. org.
- AASHTO T 358-17. "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, 2017 edition, April 2017.
- 11. ASTM Standard C642, 2013, "Standard Test Method for Density, Absorption, and Voids in Hardened Concrete."

- ASTM International, West Conshohocken, PA, 2013, DOI: 10.1520/C0642-13, www.astm.org.
- 12. ASTM Standard C670, 2015, "Standard Practice for Preparing Precision and Bias Statements for Test Methods for Construction Materials." ASTM International, West Conshohocken, PA, 2015, DOI: 10.1520/C0670-15, www. astm.org.
- AASHTO T 358-17. "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, 2017 edition, April 2017.

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2021 Concrete concrete ssociation Membership Directory



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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 by membership dues and program income, TCA is governed by a 12 member Board of Directors representing all three membership categories (Producers, Associates, and Affiliates). 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



Donna ThompsonDirector, Marketing & Meetings



John E. Pearson, P.E.Director, Technical Services



Julia HudsonOnline Education Coordinator

Tennessee Concrete Association

2021 TCA PROGRAMS

Annual Convention – Brings all members together to celebrate the year's accomplishments and to learn about the latest issues.

Tennessee Concrete Magazine – Published 3 times annually with research reports and current industry articles.

Membership Directory – Published annually with information advertising your company.

Member Updates – Thoughout the year (via email), to keep you informed of Association programs, industry activities, and promotional events

Concrete Excellence Awards – Design, Construction and Environmental awards for projects and plants across Tennessee.

Product Demonstrations & Seminars – Decorative, Pervious, Insulated Concrete Forms, Whitetopping, Flowable Fill and more

Statewide High School Concrete Essay Contest

Trade Show Displays

Concrete Career 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/cca

TCA Website – www.tnconcrete.org and visit us on Facebook at https://www.facebook.com/tnconcrete/

Training and Certification – This year John Pearson, P.E., conducted training review sessions for various ACI certifications and exams and training were also offered in the following:

- ACI Field Testing Technician, Grade 1
- ACI Flatwork Finisher & Technician
- ACI Decorative Concrete Flatwork
- ACI Adhesive and Anchor Inspector
- ACI Aggregate/Soils Bast Testing Tech 1 & 2
- ACI Concrete Laboratory Testing Technician Grade 1 & 2
- ACI Concrete Construction Special Inspector
- ACI Concrete Strength Testing Technician
- ACI Concrete Transportation Construction Inspector
- ACI Self-Consolidating Concrete Testing Technician
- NRMCA Certified Driver Training
- NRMCA Certified Concrete Production Technologist
- NRMCA Pervious Installer Certification
- NRMCA Certified Concrete Sales Professional
- NRMCA Volumetric Mixer Operator Certification

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1986-1987

Chattanooga

Past TCA

Reid Brown, PH.D. Vulcan Materials

1988

Richard Jones, Jr. Southdown, Inc. Knoxville

1989

Dyersburg

Bob Mayfield Forcum-Lannom

1990

Craig Kirchoff Lone Star Industries Nashville

1991

Joe Fowler American Limestone Co.

Knoxville

Ernie Walker, Sr.Transit-Mix Concrete
Johnson City

1993-1994

E.H. (Sonny) **Garrott III**Garrott Bros. 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 LawReady 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 HughesBuilders Supply Co.
Cookeville

2006-2007

Rick Odle

Southern Concrete Products Jackson

2007-2008

Dennie Underwood Blalock Ready Mix

Blalock Ready Mix Sevierville

2008-2009

John CurtisIrving Materials, Inc.
Nashville

2009-2010 Phillip Palczer

City Concrete Memphis

2010-2011

Andrea ChildressChildress Concrete Co.
Lewisburg

2011-2012

Steve Smith

A&W Ready Mix Concrete Kodak

2012-2013

Mike Zagula

Metro Ready Mix Concrete

2013-2014

Derris JohnsMid-South Concrete

2014-2015

Bate Bond B.T. Redi-Mix

2015-2016

Bobby CrassC&C Concrete Products

2016-2017

Tonya Alexander Irving Materials, Inc.

2017-2018

Cole Dodds

Southern Concrete Products

2018-2019

Tim Costo Sequatchie Concrete

2019-2020

Wes BlalockBlalock Ready Mix

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2021 TCA Membership Directory

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ABERNATHY CONCRETE CO., INC.

PO Box 243 Pulaski, TN 38478 Primary Contact: Bill Abernathy Phone: (931) 363-1527 abernathyconcrete@charter.net Products/Services: Ready Mixed Concrete, TDOT Certified Concrete Batch Plant, Course Aggregates, Sand

BLALOCK READY MIX

PO Box 4750 Sevierville, TN 37864 Primary Contact: Wesley Blalock

Phone: (865) 453-4433 wesblalock@blalockandsons.

www.blalockcompanies.com Products/Services: Ready Mix Concrete, Concrete Pumping, Redi-Rock Retaining Wall System, NRMCA Certified Plants, NCPA Certified Precast

Additional Information: Dennie Underwood, Technical Services Mgr.

Boyds Creek Plant

4265 Boyds Creek Hwy Sevierville, TN 37865 Phone: (865) 453-4433

Kodak Plant 3340 S. Snyder Rd.

Kodak, TN 37876 Phone: (865) 453-4433 **Kyker Ferry Plant**

151 Kyker Ferry Rd Kodak, TN 37764 Phone: (865) 453-4433

Pigeon Forge Dual Alley Plant

1836 Ridge Rd. Pigeon Forge, TN 37863 Phone: (865) 453-4433

Seymour Plant

105 Clear View Dr. Seymour, TN 37865 Phone: (865) 453-4433

BRADLEY CONCRETE CO.

PO Box 3022 Cleveland, TN 37320 Primary Contact: Charlie Lay Phone: (877) 541-4542 clav@lambcon.us 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 clark@bscblock.com www.bscblock.com Products/Services: Ready Mix Concrete, Building Materials, Concrete Block Manufacturer, Brick & Lumber.

C & C CONCRETE PRODUCTS, INC.

193 Towe String Rd. Jacksboro, TN 37757 Primary Contact: Bobby Crass Phone: (423) 562-7425 bobbydcrass@aol.com www.c-cconcrete.com Products/Services: Ready Mix Concrete, ICF's, Block, ACI Certified Personnel, NRMCA Certified, 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 www.ccreadymix.com Products/Services: Ready Mix Concrete Services

CHANDLER CONCRETE CO.INC

PO Box 131 Burlington, NC 27216 Primary Contact: Ted Chandler Phone: (336) 226-1181 ted.chandler@chandlerconcrete.

www.chandlerconcrete.com Products/Services: Ready Mix Concrete Services, Block, Hardscape & Masonry Products, **Building Supply Products**

Additional Information:

Boone

805 State Farm Rd Ste. 203 Boone, NC 28607 Sam Thompson sam.thompson@ chandlerconcrete.com Phone: (828) 963-0583

CUMBERLAND SUPPLY CO. INC.

PO Box 216 Carthage, TN 37030 Primary Contact: Phillip Hudson, Jr. Phone: (615) 735-1786 p1b2hudson@yahoo.com www.cumberlandsupplytn.com Products/Services: Ready Mix Concrete, TDOT Certified, Brick, Block, Lumber, Hardware, Masonry & Millwork

DELTA INDUSTRIES, INC.

1995 Nonconnah Blvd Memphis, TN 38132 Primary Contact: Josh Evans Phone: (901) 396-8900 jevans@delta-ind.com www.delta-ind.com Products/Services: Ready Mix Concrete Producer, Ready Mix Concrete Supplier Additional Information:

Cordova

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

DIXIE READY-MIX CONCRETE CO., INC. 1414 Old Jacksboro Hwy

La Follette, TN 37766 Primary Contact: Raymond Henson Phone: (423) 562-2277 Products/Services: Ready-Mix Concrete, Wire Mesh-Rebar, Septic Tanks, Wall Blocks, Masonry Sand

HARRISON CONSTRUCTION CO.

4817 Rutledge Pike Knoxville, TN 37914 Primary Contact: Stephen Lowrey Phone: (865) 637-1770 dbrown@harrisoncc.com www.harrisoncc.com Products/Services: Ready Mix

Services and Aggregate Sales

Additional Information:

Dandridge

1070 Epco Dr. Dandridge, TN 37725

Harriman

2412 S. Roane St. Harriman, TN 37748

Kingston

730 Gallaher Rd Kingston, TN 37763

Knoxville

1730 Transport Lane Knoxville, TN 37924

Lenoir City

200 S. Nelson St. Lenoir City, TN 37771 **Lovell Road** 730 Lovell Rd. Knoxville, TN 37932

Maryville

1921 S. Court St. Maryville, TN 37803

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1527 W. 1st N. St. Morristown, TN 37814

Oakridge

250 Union Valley Rd Oak Ridge, TN 37830

Sweetwater

1921 Sands Rd Sweetwater, TN 37874 Louisville

1717 New Topside Rd Louisville, TN 37777

IRVING MATERIALS INC

2001 Antioch Pike Nashville, TN 37013 Primary Contact: Tonya Alexander Phone: (615) 884-4935 cris.mabbitt@irvmat.com www.irvmat.com Products/Services: Ready Mixed Concrete, Related Products, Aggregate, Sand & Pervious Concrete Additional Information: Contacts in TN: Cris Mabbitt, Mike Baldoni, Phillip Hacket, Amanda Schweighardt Clarksville 261 Needmore Rd

Clarksville, TN 37042 Phone: (931) 552-6026

Columbia

4616 Hardison Mill Rd Columbia, TN 38401 Phone: (931) 540-8248

Ready Mixed Concrete Producer Members

Cookeville

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

Crossville

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

Dickson

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

Dover

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

Favetteville

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

Franklin

515 Downs Blvd. Franklin, TN 37064 Phone: (615) 224-9000

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109 Long Dr. Goodlettsville, TN 37072 Phone: (615) 219-0966

Jamestown

315 Alf Threet Rd Jamestown, TN 38556 Phone: (931) 879-5098

Lawrenceburg

2112 Helton Dr. Lawrenceburg, TN 38464 Phone: (931) 762-6409

Lebanon

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Livingston

220 School Mtn. Rd Livingston, TN 38570 Phone: (931) 823-5060

Manchester

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Morrison

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

Mt. Juliet

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

Murfreesboro

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Nashville

1433 Cowan St. Nashville, TN 37207 Phone: (615) 256-6821

Nashville

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

Nashville

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

Smithville

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

Sparta

171 imix Rd Sparta, TN 38583 Phone: (931) 836-2576

Spring Hill

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

Springfield

4277 US-431 Springfield, TN 37172 Phone: (615) 219-0966

Tullahoma

519 Vollney St 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: Charlie Lay Phone: (877) 541-4542 clay@lambcon.us 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: Cory Stultz Phone: (901) 373-1791 kendall.stultz@buzziunicemusa. com www.readymixmemphis.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: Meredith Walker Phone: (931) 363-0690 midsouth@smwb.net Products/Services: Custom Design Ready Mix Concrete, Concrete Related Accessories, Materials, Aggregates, & Culverts

Leoma

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

Additional Information:

<u>Pulaski</u>

1750 Braly Lane Pulaski, TN 38478 Phone: (931) 363-0690

3636 Central Pike

Hermitage, TN 37076

MID-STATE MOBILE CONCRETE, INC.

Primary Contact: Matt Weathers Phone: (615) 574-0061 midstatemobileconcrete@gmail.com www.midstatemobileconcrete.com Products/Services: Mobile Ready Mixed Concrete Services & Concrete Pumping Services, Pervious Concrete, Concrete Finishing

MID-WAY CONCRETE PRODUCTS, INC.

128 Natchez Trace Rd.
Camden, TN 38320
Primary Contact: Jacob Pearcy
Phone: (731) 584-6991
midwayconcreteproducts@gmail.
com
Products/Services: Ready
Mixed Concrete, Masonry Block
Producer & Tool Supplies,
Concrete Reinforcement
Additional Information:

McKenzie

24 Oak St. McKenzie, TN 38201

Phone: (731) 352-3850

MOBILE MATERIALS NASHVILLE,LLC

PO Box 90583 Nashville, TN 37209 Primary Contact: Scott D Eller Phone: (615) 414-2591 scotteller@

mobilematerialsnashville.com www.mobilematerialsnashville. com

Products/Services: Residential, Commercial, Shotcrete, Flow Fill. High Early Strength. NRMCA Volumetric Mixer Certified

NEWPORT PAVING & READY MIX

PO Box 374
Newport, TN 37822
Primary Contact: Joe Malone
Phone: (423) 623-8671
wesblalock@blalockandsons.
com
www.blalockcompanies.com

Products/Services: Ready Mix Concrete, NRMCA Certified Plant & Fleet, Environmental Product Declaration Available

ORGAIN READY MIX CONCRETE CO.INC.

240 Kraft St.
Clarksville, TN 37041
Primary Contact: Toby Hunter
Phone: (931) 647-1597
toby@orgainreadymix.com
www.orgainreadymix.com
Products/Services: Ready Mix
Concrete Services
Additional Information:

Murfreesboro

Primary Contact: Jackie Beavers 450 Middle TN Blvd. Murfreesboro, TN 37129 Phone: (615) 617-3506

PAVEMENT RESTORATIONS, INC.

10162 Stinson St.
Milan, TN 38358
Primary Contact: Casin Swann
Phone: (731) 238-2119
casin@gotpotholes.net
www.gotpotholes.net
Products/Services: Volumetric
Concrete Supply, NRCMA
Volumetric Mixer Certified,
Concrete Construction Including
Curb, Gutter & Sidewalks

2021 TCA Membership Directory

Ready Mixed Concrete Producer Members

Additional Information:

Knoxville

5651 S. National Dr. Knoxville, TN 37914 Phone: (865) 724-3882

Madison

41 Fant Industrial Dr. Madison, TN 37115 Phone: (615) 663-9011

POTTER SOUTH EAST, LLC

511 E. Monticello Pike Huntsville, TN 37756 Primary Contact: Dwayne Potter Phone: (423) 663-8222 pottersoutheastllc@gmail.com Products/Services: Heavy Highway Construction Co. with Centralized Efforts in Road & Bridge Construction serving TDOT Projects in TDOT Region 1

Pioneer

170 Royal Lane Pioneer, TN Phone: (423) 494-1117

Additional Information:

PYLES CONCRETE, INC.

PO Box 639 Columbia, KY 42728 Primary Contact: Jacob Pyles Phone: (615) 540-8484 jacobpyles@pylesconcrete.com Products/Services: Ready Mix Concrete Producer

READY MIX USA EAST TN

PO Box 2389 Knoxville, TN 37901 Primary Contact: Joe Fowler Phone: (865) 573-4501 josephc.fowleriii@rmusa.cemex. com www.cemex.com

Products/Services: Ready Mixed Concrete Sales: Shelley Parham-Tri-Cities (423)744-0022, Javier Melendez-Chattanooga (423)595-0954, Derek Moore-Knoxville (865)210-0598, Mark Doty-Knoxville (423)327-1395 Additional Information: Contact for Chattanooga market -Lee Smith (404) 423-8724 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

Dalton

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

Gray

102 Watertank Rd. 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

Lafavette

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

Maynardville

762 Maynardville Hwy. 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 wadew@rivercity-concrete.com www.rivercity-concrete.com Products/Services: Ready Mix Concrete, Concrete Blocks, Forming Supplies, Concrete Reinforcing Products, Dump Truck Services, Stone Placement Additional Information:

Selmer

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

Wavnesboro

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

SCREAMING EAGLE READY MIX

490 Barge Point Rd Clarksville, TN 37042 Primary Contact: Duane E. King Phone: (931) 553-4101 dking.screamingeagle@yahoo. com www.screamingeaglereadymix.

Products/Services: Concrete, Decorative Sealers & Acid Stains, Powder Realease & Concrete Tools

Additional Information:

Clarksville

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

SOUTHERN CONCRETE PRODUCTS, INC.

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

Additional Information:

Bolivar

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

Dversburg

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

TWIN K ENTERPRISES, LLC

16906 Alberta St. Oneida, TN 37841 Primary Contact: Kelley Krahn Phone: (423) 569-6341 kellev@twinkenterprises.net Products/Services: Ready Mix Concrete, TDOT & KYTC Certified, Concrete Pumping, Septic Tanks, Aggregate, Precast Products, Concrete Supplies Additional Information:

Dayton

220 Hurst Ln. Dayton, TN 37321 Phone: (423) 570-0687

Decatur

1768 TN-68 Decatur, TN 37322 Phone: (423) 332-6002

<u>Harriman</u>

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

Oneida

16906 Alberta St. Oneida, TN

Phone: (423) 569-6341

Soddy Daisy 210 Harrison Ln.

Soddy Daisy, TN 37379 (423) 332-6002

Wartburg

3612 Morgan Co Hwy Wartburg, TN

Associate Members

VANHOOSECO READY MIX

244 Blair Bend Dr.
Loudon, TN 37774
Primary Contact: Jeff VanHoose
Phone: (865) 458-3998
jvanhoose@vanhooseco.com
www.vanhooseco.com
Products/Services: Concrete
Homes, Roller Compacted
Concrete, Self Consolidating
Concrete, Pervious Concrete,
Precast Wall Systems, Structural
Precast Concrete, On Site
Certified Lab, Underground
Storm Water Management
Systems

VOLUNTEER CONCRETE

PO Box 682423 Franklin, TN 37068 Phone: (931) 364-5900 www.volunteerconcrete.com Products/Services: Ready Mix Producer, Concrete Pumping, Aggregates, Paving & Plant NRMCA Certified Additional Information:

Lewisburg

770 Hwy 99 Lewisburg, TN Phone: (931) 364-5900

WARRIOR PRECAST

PO Box 168
Rock Island, TN 38581
Primary Contact: Stacey Harvey
Phone: (931) 686-3240
stacey.harvey@superiorwallstn.
com
www.warriorprecast.com
Products (Sarvices: Precast

www.warriorprecast.com Products/Services: Precast Concrete Structural & Architectural

WEST TN READY MIX

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

ADMIXTURES

ACTIVE MINERALS INTERNATIONAL,

34 Loveton Circle Suite 100 Sparks, MD 21152 Primary Contact: Joey Bell Phone: (571) 377-9158 j.bell@activeminerals.com www.acti-gel.com Products/Services: Worldwide leader in kaolin and attapulgite production. Our product, Acti-Gel 208, allows concrete producers to replace natural sand with manufactured sand while maintaining pumpability, workability, and finishability.

CARBONCURE TECHNOLOGIES, INC.

1148 Stratborough Ln Fort Collins, CO 80525 Primary Contact: Ted Jones Phone: (303) 905-6946 tiones@carboncure.com www.carboncure.com Products/Services: CarbonCure manufactures a technology that introduces carbon dioxide(CO2) into concrete during mixing, enabling concrete producers to create high performing, more sustainable concrete with a reduced carbon footprint. Additional Information: Shannon Seipel Tec Serv Mgr (816) 598-6899 sseipel@ carboncure.com Rhett Dunlap Tech Service Eng.(865) 300-9596 rdunlap@ carboncure.com

CHRYSO, INC.

3958 Ruger Drive

Royse City, TX 75189

Primary Contact: Drew Carmichael
Phone: (615) 631-5323
drew.carmichael@chrysoinc.
com
www.chrysoinc.com
Products/Services: Full line
Admix & Fiber for the Concrete
& Precast Industry.
Additional Information: drew.

DON CONSTRUCTION PRODUCTS, INC.

2826 Lineberger Industrial Dr. Lancaster, SC 29720

carmichael@chrysoinc.com

Maayah Phone: (704) 891-8702 ramez.maayah@dcp-int.com www.dcpusa.com Products/Services: A UK based company with over 90 years

Primary Contact: Ramez

Products/Services: A UK based company with over 90 years of experience in developing, manufacturing & marketing innovative concrete admixtures. Additional Information: Alan Jolley (470)660-1904 Sales Rep.

EDENCRETE

8041 Rocky Hollow Cove Germantown, TN 38138 Primary Contact: Brent Sanders Phone: (470) 316-8114 bsanders@edeninnovations.com www.edencrete.com Products/Services: ASTM TYPE S Carbon Nanotube Enriched Admixture Additional Information: Brent Sanders Senior Sales Specialist (470)316-8114

EUCLID CHEMICAL COMPANY

19215 Redwood Road Cleveland, OH 44110 Primary Contact: Adam Heckler Phone: (216) 531-9222 aheckler@euclidchemical.com www.euclidchemical.com Products/Services: Concrete Admixtures, Tuf-Strand Fibers, Integral Colors, Sealers & Construction Products Additional Information: Ron Shirley(901) 355-8306 Kirby Fiveash (404)307-2411 Ron Foster (239) 633-0437

GCP APPLIED TECHNOLOGIES

2325 Lakeview Pkwy
Alpharetta, GA 30009
Primary Contact: Jeff Slaughter
Phone: (341) 303-4880
jeff.slaughter@gcpat.com
www.gcpat.com
Products/Services: We are
inspired to influence how
the world is built. We are
dedicated to the development
of high performance products,
the continued pursuit of
advancement in construction
technologies, simplifying the
complexities of construction

worldwide, and delivering value to our customers. *Additional Information:* Zack Swanson - Technical Sales (410) 794-6973 zack.swanson@gcpat.com
Jeff Slaughter St. Louis, MO (314)303-4880
Dan Meine - Director of Sales daniel.j.meine@gcpat.com

MASTER BUILDERS

23700 Chagrin Blvd Cleveland, OH 44122 Primary Contact: Jason Ford Phone: (423) 609-0235 jason.ford@mbcc-group.com www.mbcc-group.com Products/Services: MasterPozzolith Series, MasterPolyheed Series, MasterGlenium Series, MasterSet Series, MasterFibers, Master X-Seed Series, MasterLife 300C & 300D Waterproofing, Green Sense Concrete, SRA/CRA, MB Slab Additional Information: Denny Lind (615) 390-4899 Drag Yarbro (901) 484-9190 Nicholas Shortridge (931) 247-Jaclyn Streeter (865) 454-2301

SIKA CORP

1930 Sarasota Business Pkwy Convers, GA 30013 Primary Contact: Jason Zelinski Phone: (864)909-0869 zelinski.jason@us.sika.com www.sikausa.com Products/Services: Concrete Admixtures, Color, Fibers & Waterproofing Admixtures Additional Information: Bryan Strevel Sr. Sales Rep.(615)828-7332 strevel.bryan@us.sika.com Andy Smith(336) 689-1105 smith.andv@us.sika.com, Paul Ramsburg (864) 344-4109 ramsburg.paul@us.sika.com

2021 TCA Membership Directory

Associate Members

AGGREGATES

E. DILLON & CO.

2522 Swords Creek Rd Swords Creek, VA 24649 Primary Contact: Mike Miller Phone: (276) 971-4630 mmiller@edillon.com www.edillon.com Products/Services: E.Dillon is a long-time, top provider of aggregates, finely ground & sand size dolomite products throughout the SE, NE & Middle US. We produce highchemistry dolomites for plate glass manufacturing, fiberglass, brick coatings & specialty fillers in concrete. Produce EverLoc® a Segmental Retaining Wall System.

Additional Information: Steve St.Clair (276)701-0015, Donny Dye (276)971-0965

PINE BLUFF MATERIALS CO.

1030 Visco Drive
Nashville, TN 37210
Primary Contact: Mike
Bohleber
Phone: (615) 254-1956
mike.bohleber@pbmat.com
www.pbmat.com
Products/Services: Specification
Sand, Gravel & Stone
Additional Information:
Specification Sand, Gravel &
Stone

ROGERS GROUP INC.

421 Great Circle Rd Nashville, TN 37202 Primary Contact: Granville Grant Phone: (615) 613-1115 granville.grant@rogersgroupinc.

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) 361-8551 badgettj@vmcmail.com www.vulcanmaterials.com Products/Services: Crushed Stone & Sand Additional Information:
Rebekah Bomar - bomarr@
vmcmail.com

CEMENT

CEMEX

PO Box 100813 Birmingham, AL 35210 Primary Contact: Scott Showerman Phone: (336) 512-3552 cody.eaton@cemex.com www.cemexusa.com Products/Services: Portland Cement Additional Information: Stevend George -Sales Mgr. Knoxville Plant (205) 777-2858 stevend. george@cemex.com Cody Eaton -Sales Mgr. Nashville Terminal (615) 478cody.eaton@cemex.com

CONTINENTAL CEMENT CO.

16401 Swingley Ridge Rd
Chesterfield, MO 63017
Primary Contact: Stewart Parker
Phone: (636) 532-7440
stewart.parker@
continentalcement.com
www.continentalcement.com
Products/Services: Cement
Manufacturer
Additional Information: David
Loomes, VP Sales & Supply
Chain (800)625-1133 2549
Channel Ave. Memphis,TN
38106

HOLCIM US

4037 Rural Plains Circle
Suite 225
Franklin, TN 37064
Primary Contact: Benoit
Cotnoir
Phone: (615) 771-1220
benoit.cotnoir@lafargeholcim.com
www.lafargeholcim.com
Products/Services: Portland
Cement, Slag, Masonry &
Oilwell Cement
Additional Information: Joey
Deroe (870) 215-3420 Heath
Rogers (901) 833-3647

LEHIGH CEMENT CO.

400 Riverhills Business Park Suite 437 Birmingham, AL 35242 Primary Contact: Phil Detwiler Phone: (205) 968-5803 phil.detwiler@lehighhanson. com www.lehighhanson.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

ALABAMA
2000 Southbridge Pkwy Suite
600
Birmingham, AL 35209
Primary Contact: Stephen
Snipes
Phone: (205) 423-2600
ssnipes@natcem.com
www.nationalcement.com
Products/Services: Portland
Cement Type I, Ib, III, Portland
& Masonry Cement Bags
Additional Information: Scott
East Territory Mgr (404) 647-

FIBERS

9643 seast@natcem.com

DURAFIBER, INC.

714 West Main St. Suite 205
Murfreesboro, TN 37129
Primary Contact: Mike Deaton
Phone: (615) 333-9883
durafiber@aol.com
www.durafiber.com
Products/Services: Furnish
Concrete Fiber Reinforcement,
which includes Ultrafiber 500,
Polypropylene Fiber, Steel Fiber,
& Fritz Pak Products

FLYASH

BORAL RESOURCES

10701 S. River Front Pkwy Suite 300 South Jordan, UT 84095 Primary Contact: Clark Gates Phone: (615) 308-0219 clark.gates@boral.com www.flyash.com Products/Services: Fly Ash Sales, Fly Ash Disposal, Bottom Ash Sales, Bottom Ash Disposal. Additional Information: Darrell Wilson (336) 210-7435 TSR Greg Thomas (501)844-6607 TSR

CHARAH SOLUTIONS, INC.

12601 Plantside Dr. Lousiville, KY 40299 Primary Contact: Sara Keating Phone: (502) 245-1353 skeating@charah.com www.charah.com Products/Services: Charah is a leading provider of Class C&F fly ash to Ready Mix Producers throughout the country via its MultiSource network. Additional Information: Randy Compton-VP Sales (865) 414-1518 Christian Lentz-Sales Mgr (502) 552-6538

THE SEFA GROUP 217 Cedar Rd.

Lexington, SC 29073 Primary Contact: Bert Nunn Phone: (803) 622-9290 bnunn@sefagroup.com www.sefagroup.com Products/Services: Fly Ash Sales, Technical Service, Transportation Service, Pig Rentals, Fly Ash Sources in TN, NC, & SC. Additional Information: Mark Casey Technical Sales & Service (865)806-6950mcasey@ sefagroup.com Bert Nunn Vice President Sales (803) 622-9290 bnunn@sefagroup.com

ARCHITECTS

HEDSTROM DESIGN LANDSCAPE ARCHITECTURE

110 W. Magnolia Ave. Knoxville, TN 37917 Primary Contact: Sara Pinnell Phone: (865) 329-0012 sara@hedstromdesign.com Products/Services: Landscape Architecture Services

BATCH PLANTS & EQUIPMENT

1800 International Park Dr. Ste

COMMAND ALKON

400
Birmingham, AL 35243
Primary Contact: Lori Allen
Phone: (800) 624-1872
lallen@commandalkon.com
www.commandalkon.com
Products/Services: Batching
Controls, Dispatching and
Accounting Software,
Production/Quality Control
Software and Performance
Management Software

SOUTHERN CONCRETE MACHINERY, LLC

PO Box 11098 Murfreesboro, TN 37129 Primary Contact: Chris Davenport Phone: (615) 957-4600 chris@southernconcrete machinery.com www.southernconcrete machinery.com Products/Services: Con-E-Co Batch Plants, Pearson Hot Water & Chiller Systems, Ph Systems,BFK Reclaimers & Plant Parts for All Plant Manufacturers.

STEPHENS MFG CO. INC.

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

SYSTEMS & CONTROLS

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

CONCRETE PUMPING

CONCRETE PUMP PARTNERS

3950 Dickerson Pike Nashville, TN 37207 Primary Contact: Jon Kemp Phone: (615) 299-9899 melissagay@pumppartners.com www.pumppartners.com Products/Services: Concrete Pumping Services

REYNOLDS CONCRETE PUMPING

720 Beech St.
Bowling Green, KY 42101
Primary Contact: Johnny Phillips
Phone: (615) 213-2600
jphillips@reynoldscorporation.
com

www.reynoldscorporation.com Products/Services: Concrete Pumping Services: Boom Pumps, Line Pumps, Placing Booms, Rock Slingers

CONSTRUCTION EQUIPMENT

MULTIVIBE, INC.

3125 N. Friendship Rd.
Paducah, KY 42001
Primary Contact: Carl Ellis
Phone: (270) 554-2615
carle@multivibe.com
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
bc.powerrental@yahoo.com
Products/Services: Vertical
forms, Masonry Supplies, Power
Tools & Grinders

INSULATED CONCRETE FORMS

A.G. HEINS CO. INC.

116 Heins St.
Knoxville, TN 37921
Primary Contact: A. Gordon
Heins III
Phone: (865) 525-5363
gordonh@agheins.com
www.agheins.com
Products/Services: Concrete &
Masonry Accessories, Insulated
Concrete Forms, Waterproofing
& Sealants.

FORM-A-DRAIN

2801 Post Oak Blvd Ste 600 Houston, TX 77056 Primary Contact: Johnny Zamora Phone: (713) 293-2504 jzamora@westlake.com www.formadrainsolutions.com Products & Services: Form-A-Drain installed before basement construction begins as the foundation footing forms. Form-A-Drain stays in place permanently & forms a complete sub-slab perimeter loop around foundation. No need to strip, clean & transport forms to next job site.

Products: Form-A-Drain Plus, Platon Waterproofing Membrane, Certa-Form UltraFlex Forms for curves or straightways.

NUDURA/TREMCO CPG

596 Summit Point Canton, GA 30114 Primary Contact: John Ritch Phone: (866) 468-6299 jritch@tremcoinc.com www.nudura.com Products/Services: NUDURA is a leading innovator of permanent concrete forming systems & accessories

PARKS ICF, LLC

Concrete Forms

PO Box 10081 Knoxville, TN 37939 Primary Contact: Charles Parks Phone: (865) 688-2366 charles@parksicf.com www.parksicf.com Products/Services: Insulated

MATERIAL SUPPLIERS

CLEMONS CONCRETE COATINGS

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

PERK PRODUCTS&CHEMICAL CO.,INC.

PO Box 100585
Nashville, TN 37224
Primary Contact: Scott
Perkerson
Phone: (615) 242-6157
scott@perk-products.com
www.perk-products.com
Products/Services: Manufacturer
of Concrete Coatings to Include
Sealers, Water-Proofers, Stains,
Releases, and Surface Retarders.
Distributor of Bagged & Liquid
Calcium Chloride.

SCOTWOOD INDUSTRIES

12980 Metcalf Ave. Ste.240 Overland Park, KS 66213 Primary Contact: Doug Pratt Phone: (314) 566-4153 dpratt@scotwoodindustries.com www.scotwoodindustries.com Products/Services: Full Service Distributor of Magnesium Chloride & Calcium Chloride for Ice Control, Anti-Icing, Dust Control, & Road Stabilization.

SICALCO, LTD.

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

SOLOMON COLORS INC.

4050 Color Plant Rd Springfield, IL 62702 Primary Contact: Matt Park Phone: (615) 686-0880 mpark@solomoncolors.com www.solomoncolors.com

2021 TCA Membership Directory

Affiliates (cont.)

Products/Services: Colors for Concrete: Liquid, Dry, & Granular, Decorative Concrete: Stains, Stamps, Sealers, Resurfacing Overlays, Densifiers, Surface Retarders & Ultra-fiber

PRECAST

BARGER & SONS, INC.

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

BRADLEY TANK & PIPE, LLC

PO Box 3146 Cleveland, TN 37328 Primary Contact: Eddie Johnson Phone: (423) 479-4482 edjohnson@bradleytankandpipe. com Products/Services: Redi-Rock

Products/Services: Redi-Rock Retaining Walls, Sanitary/Storm-Manholes, Utility Structures, Grease Interceptors & Water Quality Structures

FOLEY PRODUCTS CO.

PO Box 2447 Columbus, GA 31902 Phone: (706) 563-7882 dtyson@theconcreteco.com www.foleyproducts.com Products/Services: Precast Box & Round Structures, Drainage Products, Specialty Items

GATE PRECAST CO.

Ashland City, TN 37015

Primary Contact: James Pearson

Phone: (615) 792-4871

jpearson@gateprecast.com

www.gateprecast.com

Products/Services: Precast

Concrete Systems, Wall Panel,

Column Covers & Spandrels

HOLTON CONCRETE PRODUCTS, LLC

6726 Manchester Hwy Murfreesboro, TN 37127 Primary Contact: William Cole Phone: (615) 893-9216 jrmcole@aol.com Products/Services: Precast Concrete & Pipe

JARRETT CONCRETE PRODUCTS INC.

2012 Hwy 12 S Ashland City, TN 37015 Primary Contact: Travis Jarrett Phone: (615) 417-6311 frank.bowen@ jarrettconcreteproducts.com www.jarrettconcreteproducts.com Products/Services: Precast Concrete Structures

MID-SOUTH PRESTRESS

2949 Joe Dowlen Rd Pleasant View, TN 37146 Primary Contact: Nick Thompson Phone: (615) 746-6606 nthompson@msprestress.com Products/Services: Structural Precast/Prestressed Concrete Manufacturer & Erector. Hollowcore Precast Columns, Precast/Prestressed Beams & Solid Slabs.

TRUCKS & EQUIPMENT

CON-TECH MFG.,INC.

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

KALES TRUCK & HEAVY EQUIPMENT

375 Red River Rd Gallatin, TN 37066 Primary Contact: Cliff Toliver Phone: (706) 987-0214 ctoliver@ kalestruckheavyequipment.com www.kalestruckheavyequipment.com Products/Services: National full-service on-site repair professional specializes in consulting, managing & staffing shops as well as providing a fixed budget repair solution proven to increase truck availability while working off of a fixed R&M Budget.

KNOX CONCRETE CONSULTANTS,

915 Doyle Rd Ste 303 Deltona, FL 32725 Primary Contact: Keith Knox Phone: (813) 546-6323 keith@silopros.com www.knoxconcreteusa.com Products/Services: We Service the Concrete Industry Cleaning Out Trucks, Silos, Filer Bags, etc.

MCNEILUS TRUCK

PO Box 367 Villa Rica, GA 30180 Primary Contact: Brad Towler Phone: (770) 459-5151 btowler@mcneilusco.com 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: Chelsey Kutz
Phone: (330) 204-1079
chelsey.kutz@terex.com
www.terex.com/concrete
Products/Services: Front
Discharge Ready Mix Trucks,
Complete Parts, Accessories &
Field Service Network

ADVANTAGE CONST. SERVICES

Contractor Members

1208 Hwy 47 E
Dickson, TN 37055
Primary Contact: Trent Smith
Phone: (615) 740-8777
trentacs@comcast.net
www.advantageconst.com
Products/Services: Segmental
Retaining Walls- Design
Performed In House

BAKER'S CONSTRUCTION SERVICES, INC.

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

BALTZ & SONS CONCRETE

10505 US Hwy 64 Ste 1 Arlington, TN 38002 Primary Contact: Kevin Baltz Phone: (901) 465-4337 kevin@baltzconcrete.com www.baltzconcrete.com Products/Services: Decorative Residential & Commercial Concrete & Pervious Concrete

BELL & ASSOCIATES

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

BHS CONCRETE LLC

860 Vaughn Rd Memphis, TN 38122 Primary Contact: Joe Brannon Phone: (901) 603-9997 joe@bhsconcrete.com www.bhsconcrete.com Products/Services: Residential & Commercial, Form & Place Concrete Foundations, Slabs, Flatwork, Walls, Patios & Driveways

Contractor Members

BLACK CONSTRUCTION, LLC.

P.O. Box 4051 Cleveland, TN 3732 Primary Contact: Sherrill Black Phone: (423) 476-7278 sadmb@aol.com www.commercialconcretetn.net Products/Services: Industrial & Commercial Concrete, Excavate, Flatwork, TDOT Work & Walls

BLOUNT CONTRACTORS, INC.

635 Dameron Ave. Knoxville, TN 37921 Primary Contact: William Hall Phone: (865) 981-9090 wchall@blountcontractors.com www.blountcontractors.com Products/Services: Full Service Concrete Contractor wchall@blountcontractors.com

BURWIL CONSTRUCTION CO.

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

C.J. MAHAN CONST. CO LLC

250 Hartford Ave.
Columbus, OH 43222
Primary Contact: Jeff North
Phone: (614) 875-8200
jnorth@cjmahan.com
www.cjmahan.com
Products/Services: Heavy
civil and marine contractor
specializing in major bridge
structures along with experience
with dams, piers, docks, loading
facilities, deep heavy capacity
foundations, drilled shafts,
micro-piles and more.

CARTER CONCRETE STRUCTURES, INC.

1960 C. Parker Court Stone Mountain, GA 30087 Primary Contact: Eric Ristic Phone: (770) 978-1212 jamie@carterstructures.com www.carterstructures.com Products/Services: Cast-In-Place Concrete Contractor

CHARLES GOAR CONCRETE

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

CHARTER CONSTRUCTION INC.

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

CHAVERS CONSTRUCTION, INC.

801 Virecent Rd
Cantonment, FL 32533
Primary Contact: Ryan Chavers
Phone: (850) 474-1966
ryan@chaversinc.com
www.chaversinc.com
Products/Services: Concrete,
Asphalt, Road Construction,
Underground Utilities, Site Work

CONCRETE CRAFT OF NORTH NASHVILLE

113 Shivel Dr.
Hendersonville, TN 37075
Primary Contact: Jason
Nordwall
Phone: (425) 903-6544
jason.nordwall@concretecraft.com
www.concretecraft.com/northnashville-tn
Products/Services: Concrete
Installation, Decorative
Concrete Overlays, Restoration,
Commercial & Residential,
Concrete Grinding

DEMPSTER POURED FOUNDATIONS

PO Box 11331
Knoxville, TN 37939
Primary Contact: Ross
Dempster
Phone: (865) 755-0869
ross@dpfconcrete.com
www.
dempsterpouredfoundations.com

Products/Services: Poured In Place Walls, Follow Us On Instagram Dempster Poured Foundations LLC

DENHAM-BLYTHE CO., INC.

3030 Business Park Cir Ste 200 Goodlettsville, TN 37027 *Primary Contact:* Vance Hohn *Phone:* (615) 855-2244 dbull@denhamblythe.com www.denhamblythe.com *Products/Services:* Industrial Design-Build Construction & Engineering

DENNIS CONCRETE SERVICE, INC.

662 B Sango Rd. Clarksville, TN 37043 Primary Contact: Josh Dennis Phone: (931) 801-2565 dennisconcrete@yahoo.com Products/Services: Concrete Construction Services & Pervious Concrete

DUSTY & SONS CONCRETE, LLC

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

GLENN E. MITCHELL & CO., INC.

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

H&C CONCRETE CONSTRUCTION GROUP

917 8th Ave. S. Ste E Nashville, TN 37203 *Primary Contact:* Jon Harris *Phone:* (615) 647-7513 jharris@hcconcrete constructiongroup.com www.hcconcrete constructiongroup.com *Products/Services:* Turnkey Concrete Contractor

HAWKINS ASPHALT PAVING, LLC

PO Box 292 Wartrace, TN 37183 Primary Contact: Chris Hawkins Phone: (931) 389-9671 chrishawkins6852@gmail.com www.hawkinspaving.com Products/Services: Paving of City Streets, Curbing, Excavation, Driveways & Pervious Concrete

HI-WAY PAVING INC.

4343 Weaver Court N.
Hilliard, OH 43026
Primary Contact: Ed Wessel
Phone: (614) 876-1700
edwessel@hiwaypaving.com
www.hiwaypaving.com
Products/Services: Large scale
concrete paving company
operating in the southeast and
midwestern states. Specializing
in airfield and interstate slipform
paving.

HR CONCRETE SOLUTIONS, LLC

722 Powdermill Rd Ste A Gatlinburg, TN 37738 Primary Contact: James Reeves Phone: (865) 335-2346 James@HR-Concrete.com www.hrconcreteco.com Products/Services: CIP Concrete, Decorative Concrete, Footings & Foundations, Flatwork, All Concrete Applications & Concrete Walls

JAY-TON CONSTRUCTION CO.

7000 Hwy 59 W.
Burlison, TN 38015
Primary Contact: Chase Sellers
Phone: (901) 476-1487
csellers@jay-ton.com
www.jay-ton.com
Products/Services: Commercial
Concrete Placement for
Manufacturing, Energy
Facilities, Distribution Centers
& Warehouses

2021 TCA Membership Directory

Contractor Members

JINKS CONCRETE CONTRACTORS INC.

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

JONES BROS. CONTRACTORS, LLC

1010 Pleasant Grove Place Mt. Juliet, TN 37122 Primary Contact: Kevin Hinson Phone: (615) 754-4710 jbritton@jonesbroscont.com www.jonesbrosinc.com Products/Services: Road and Bridge Construction

KCS CONSTRUCTION, LLC

PO Box 1939 Columbia, TN 38402 Primary Contact: Wade Kincaid Phone: (931) 490-9782 wade@kcsllc.com www.kcsllc.com Products/Services: Residential & Commercial Concrete, Concrete Subcontractor For All Size Home Builders, Pervious Certified

LITHKO CONTRACTING INC.

359 Mason Rd. LaVergne, TN 37086 Primary Contact: Chris Dittman Phone: (615) 834-8773 dittman@lithko.com www.lithko.com Products/Services: Total Package Concrete Contractor

LU, INC.

PO Box 607 Kingston Springs, TN 37082 Primary Contact: Warren Cook Phone: (615) 952-5501 warren.cook@guiderail.com www.guiderail.com Products/Services: LU is a safety & specialty highway contractor operating across the southeast. We perform fencing, guiderail, signage, attenuator install & repairs.

MARCOR CONSTRUCTION, INC.

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

NICKELL COMPANY, LLC

407 Cemetery Ave.
Columbia, TN 38401
Primary Contact: Steve Wiley
Phone: (931) 388-3644
stevew@dnickell.com
www.dnickell.com
Products/Services: Concrete
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Sidewalks, Curb & Gutter,
Foundations, Floor Slabs &
Walls.

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PO Box 150 Milan, TN 38358 Primary Contact: Bill Smith Phone: (731) 695-5663 bill@nsite-inc.com Products/Services: General Contractor Specializing in Downtown Improvement Projects, Certified Pervious Installer

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1706 Industrial Loop Rd Pulaski, TN 38478 Primary Contact: Charles Watkins Phone: (931) 309-2039 charleswatkinsandcompany@gmail.com Products/Services: Bridge Builders, Retaining Walls, Box Culverts, Span Bridges, Pipe in Walls, ACI Certified Flatwork

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Primary Contact: Brannon
Goodwin

Phone: (615) 242-5448

brad@rtgcontractors.com

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Infrastructure

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804 E Gov. John Sevier Hwy Knoxville, TN 37920 Primary Contact: Jason Dunaway Phone: (865) 851-9236 jason@smcknox.net Products/Services: Commercial Concrete Installation

SOUTHERN CONSTRUCTORS, INC

PO Box 9476

Knoxville, TN 37940

Primary Contact: Richard Huskey Phone: (865) 579-5351 pturner@ southernconstructorsinc.com www.southernconstructorsinc.com Products/Services: General Contractor Specializing in Infrastructure- Water & Wastewater Plants, Pump

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WILSON CONSTRUCTION GROUP, LLC

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Athens, TN 37371
Primary Contact: Keith Wilson
Phone: (423) 745-0600
info@wilsonbuilds.com
www.wilsonbuilds.com
Products/Services: New
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Bridge Rehabilitation, Hanger
Construction, Streetscape
Construction, Construction of
Building Additions

WRIGHT BROTHERS CONST.CO. INC.

1500 Lauderdale Memorial Hwy Charleston, TN 37310 Primary Contact: Chris Calandrino Phone: (423) 336-2261 ccalandrino@wbcci.com www.wbcci.com Products/Services: Bridges, Culverts, Retaining Walls, Concrete Structural Items

Engineer Firms/Testing Labs

ATC GROUP SERVICES

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

ATC GROUP SERVICES

3144 Stage Post Dr.
Bartlett, TN 38133
Primary Contact: Dave Schmidt
Phone: (901) 259-2362
dave.schmidt@atcgs.com
www.atcgroupservices.com
Products/Services: Geotechnical
& Construction Material Testing
Services, Monitor Concrete
Testing, Fill Placement, Density
Testing & Steel Inspection

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com
www.bargedesign.com
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BUILDING & EARTH SCIENCES, INC.

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Birmingham, AL 35210
Primary Contact: Mark Nolen
Phone: (615) 403-8458
mnolen@buildingandearth.com
www.buildingandearth.com
Products/Services: Geotechnical
Engineering Services, CMT &
Special Inspections

C&T ENGINEERING & INSPECTION,LLC

1113 Murfreesboro Rd. Ste 106 Franklin, TN 37064 Phone: (615) 567-3306 Primary Contact: Tom Lamb tom.lamb@ct-eng.net Products/Services: Construction Management Services, Environmental Consulting, and Labor Compliance Management for Public and Private Sector

COLLIER ENGINEERING

2949 Nolensville Pike
Nashville, TN 37211
Primary Contact: James
Beaudoin
Phone: (615) 331-1441
jim.beaudoin@
collierengineering.com
www.collierengineering.com
Products/Services: Consulting
Engineering & Materials
Inspection

CONSTRUCTION MAT.LAB/DBA, INC.

PO Box 9449
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ECS SOUTHEAST, LLP

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2561 Willow Point Way Knoxville, TN 37931 Primary Contact: Josh Eslinger Phone: (865) 539-8242 jeslinger@geoservicesllc.com www.geoservicesllc.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 jdonovan@geotechnology.com www.geotechnology.com Products/Services: Engineering Services, Construction Materials Testing & Special Inspections

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Primary Contact: Chris Lamus
Phone: (615) 649-5264
chris.lamus@ohm-advisors.com
www.ohm-advisors.com
Products/Services: Architecture,
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Design, Landscape Architecture
& Surveying

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6150 E. 75th St. Indianapolis, IN 46250 Primary Contact: Jeff Young Phone: (317) 576-8058 mdockery@patrioteng.com Products/Services: Materials Testing Services, Environmental Engineering, Geotechnical Engineering

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Primary Contact: Kenny Freer
Phone: (615) 244-8591
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www.ragansmith.com
Products/Services:
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Landscape Architecture &
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ROSS BRYAN ASSOCIATES, INC.

1 Vantage Way Ste B-400 Nashville, TN 37228 Primary Contact: Michael Paris Phone: (615) 329-1300 paris@rossbryan.com

2021 TCA Membership Directory

Engineer Firms/Testing Labs

www.rossbryan.com *Products/Services:* Structural Engineering

S&ME, INC.

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

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Products/Services: Construction
Materials Testing (ACI, ICC,
PTI) Geo-technical Engineering
& Environmental Consulting
Services

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Chattanooga, TN 37402
Primary Contact: Randy Brown
Phone: (423) 756-7970
rbrown@thompsonengineering.com
www.thompsonengineering.com
Products/Services: Consulting,
Inspection, Geotech, Materials
Testing, Survey & Design

TTL, INC.

5010 Linbar Dr. Ste 153
Nashville, TN 37211
Primary Contact: Martin
Medley
Phone: (615) 331-7770
mmedley@ttlusa.com
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Products/Services: Geotechnical
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Material Testing, Environmental
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1428 Chestnut St. Ste 110
Chattanooga, TN 37402
Primary Contact: Jim Floyd
Phone: (423) 842-3335
aj.donahue@volkert.com
www.volkert.com
Products/Services: Consulting
Engineers, Transportation,
Roadway, Structural Design,
Surverying and Construction
Engineering and Inspection
(CEI) Environmental.

WOOD KNOXVILLE

2030 Falling Waters Rd Ste 300 Knoxville, TN 37922 Primary Contact: Kelvin Campbell Phone: (865) 429-4509 kelvin.campbell@woodplc.com Products/Services: Engineering Services

TCA SCHOLARSHIP RECIPIENT SENDS NOTE OF GRATITUDE

Recently, we received a very thoughtful letter from a scholarship recipient, Joseph McDaniel, thanking TCA's members for choosing him as a recipient. To say our hearts were warmed would be an understatement. We thought it might do the same for you! Clearly, Mr. McDaniel is well on his way to a successful career in the concrete industry.

Each year our TCA Foundation Golf Tournament provides the primary source of funding for the Concrete Industry Management scholarship program. TCA was one of the first organizations to offer student scholarships to the CIM program and since its inception we have provided scholarships to over 40 different students with the majority of this funding coming from our annual golf event.

Please help to continue this great tradition of scholarships by registering today to play in the TCA Foundation Golf Tournament this Oct. 26th at Greystone Golf Course in Dickson, TN. Scholarship recipients like Mr. McDaniel will appreciate your participation more than you know!

Mr. Alan Sparkman

Tennessee Concrete Association

699 President Place Suite 400

Smyrna, TN 37167

Mr. Sparkman,

I would like to thank you for awarding me the Tennessee Concrete Association Scholarship! It is truly an honor to receive this scholarship, and I am very grateful to have been chosen. This scholarship will be so helpful as I pursue a career in the concrete industry. I am looking forward to being able to put these funds to use, and I will not forget your generosity. Know that you are a great contributor to my success.

Concrete has always been a big part of my life. I am a 5th generation concrete finisher. When I was nine years old, I started working with my Dad and Granddaddy pouring concrete. I loved learning the trade and working with others. Now, I am pursuing my own career in concrete at MTSU. I am not certain where I will fit into this industry just yet, but I know God will lead me there. Thank you again for helping me reach my goals and carry on a legacy!

incerely,

Joseph Mc Daniel

Joseph McDaniel

CIM SPRING FUNDRAISING

The CIM Jim Speakman Golf Tournament is back to full capacity and held on May 5 with both morning and afternoon flights. Fifty-two teams and 208 golfers helped CIM Patrons raise \$103,500.



CIM 3050 BENEFITS SPECIAL NEEDS CHILD



Professor Huddleston's CIM 3050 was approached by the MTSU Day Care to pour sidewalk access so a special needs child could

access the playground instead of rolling their wheelchair through the mud. The class also served the MTSU community by pouring a handicap accessible sidewalk for the Chris Young Café.



STUDENT COMPETITIONS

Due to Covid cancellations and shutdowns, many student com-



petitions for the past year have been cancelled or postponed. However, no CIM students want to sit idle, so the four schools competed amongst themselves by making concrete tensegrity tables that will be judged by independent industry professionals.

SCHOOL OF CONCRETE AND CONSTRUCTION MANAGEMENT BUILDING UPDATE

The School of Concrete and Construction Management hosted a groundbreaking for the new \$40 million 54,000 square foot building on April 6. The building is currently under construction on a 15 month timeline and expected to open August of 2022.



RESEARCH

Dr. Brown and Jessie Boone with Southeast Portland Cement Association continued their full depth reclamation study through TDOT to assist them in updating their



state specifications as well as create a quality control manual for future projects. They are focusing on cement stabilization in the field and investigating asphalt emulsion in the lab.

Dr. Zhifu Yang is in the middle of a \$220k TDOT research grant looking at recycled concrete aggregate for specification by the DOT and Nashville Davidson County Public Works.



TECHNICAL DIRECTOR'S MESSAGE—JOHN B. PEARSON, P.E.



IMPORTANT DOCUMENT UPDATES PLEASE KEEP READING!

t is hard to believe that 2020 is over and 2021 is already halfway behind us. While we have all had our noses to the grindstone several important documents have been written or updated that could have a significant impact on ready mix producers and others in the concrete industry. **Please keep reading!**

IMPORTANT ASR FINDINGS

In late 2020 an article was published by researchers at the University of Tennessee (and others) that documents the presence of alkali silica reactive aggregates in each of the four TDOT regions. It is critical that producers know whether their aggregates are potentially reactive, and how to mitigate (prevent/reduce) detrimental ASR related expansion and cracking. Please read the article titled *Important Update Concerning Alkali-Silica-Reactivity (ASR)* and Tennessee Limestones included in this issue of the Tennessee Concrete Magazine for more information.

ASTM C94 STANDARD SPECIFICATION FOR READY-MIXED CONCRETE

ASTM C94 is referenced in most construction specifications. Since 1935 there has been a requirement in ASTM C94 that requires concrete discharge to be completed within 90 minutes after the introduction of the mixing water to the cement and aggregates or the introduction of the cement to the aggregates. In 2021 the 90-minute requirement was removed, although the requirement for a time limit was not removed. The new version requires the purchaser to specify in the purchase order the time required for discharge to be completed. If a time is not specified then the producer is required to specify the time limit, and in either case the purchaser is required to state the discharge time limit on the delivery ticket. The new version of C94 does not prevent 90

minutes or another time limit from being specified in the project specification. Although it may be some time before the new version of C94 is referenced in project specifications, producers and others in the industry need to prepare for this change.

ACI 301 SPECIFICATIONS FOR CONCRETE CONSTRUCTION

In 2020 ACI 301 changed its name from *Specifications for Structural Concrete* to *Specifications for Concrete Construction*. The revision brings the specification more in line with the current version of the ACI 318 building code as well as adds shotcrete, internal curing, mineral filler and recycled concrete aggregates to the scope while also making it clear that the 301 specification is not limited to structural concrete.

ACI 332 CODE REQUIREMENTS FOR RESIDENTIAL CONCRETE AND COMMENTARY

In 2020 ACI 332 was revised. The most notable changes were made to the exposure categories and classes for concrete mixtures. The changes make the document more consistent with the exposure classes and categories of the current ACI 318 building code. Most notably, the current requirements now specify maximum water cement ratios instead of slump, and the minimum required strength for the most severe freeze-thaw exposure class changed from 4,000 psi to 4,500 psi for unreinforced concrete and 5,000 psi for reinforced concrete.

Please continue to visit our website and read our member updates to keep up on important industry changes.

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