President’s Message

“Where Does ASCC Fit In?”

Tommy Ruttura, Guest Columnist

I think about this so often and though my career is winding down, I am trying to instill in the next generation of Ruttura and Sons’ leaders where ASCC fits in.

ACI and ASCC members, how often have you been quoted an ACI document or building code by someone you think is wrong, or for that matter knows nothing about the concrete business? It’s happened to all of us.

Take for example ACI 306, Cold Weather Concrete. If you read it, chances are you might not cast any concrete in the cold. Not really, but it sure could cost you a lot of money.

What’s my point? I think you have to get involved. I don’t think it’s easy, but I think it’s more important than the price you pay for products.

I attend ACI conventions for good reason. Sometimes it’s for our company; the recognition of being on an ACI committee isn’t bad. But I really do it for the industry, the relationships and the learning experience. At 65 you’d think I should know enough about this concrete industry. No doubt I know enough to get by; I am often flattered when someone at work or in the industry calls to ask advice.

What really gets me going is knowing members like Steve Lloyd. Steve is a good friend, a great concrete contractor, the man in the black hat, the man committed to his people, his trade, and his industry. When I am with Steve I am really happy; his stories, his warm-hearted commitment to us in the concrete business is unconditional.

You should see him at ACI. Steve and I share the same background, finishing concrete. We continue to work in the trade of concrete. We are field generals, always getting our hands dirty, looking for better ways of figuring out this product. We both, Steve more than me, are always experimenting with new technology to try and fix the problems inherent in our industry.

At ACI committee meetings it can be a little intimidating. A lot of PhDs, engineers, educators, smart people; for many contractors it’s not easy to fit in. In fact at times it’s not a place a contractor feels secure.
Where am I going with this? Guys like Steve and I have found a place in the process and our ideas are listened to. Not always welcome, but we are making inroads. We are leaving our stamp in the process, more a journeyman’s prospective. Now I know we aren’t all cut out to sit at ACI and participate, but if you don’t fight the battle you won’t ever see change.

While sitting in on ACI 302, Floor Construction, chaired by contractor Joe Neuber, I was so impressed on how Joe conducted the meeting. Like all of us who lead people to complete a great project, Joe orchestrates a wonderful meeting. And yes, in the room with PhDs, engineers, educators and contractors.

We need your help. Yes, ASCC is making a huge difference for your success.

The icing on the cake is the lifelong friendships and relationships. I get to see Jerry Holland, Allen Face, Kevin MacDonald, Peter Ruttura, Luke Snell, Bruce, Ward, Bev, Scott Anderson, Chris Plue, Eric Peterson, Denny Ahal, Mike Schneider, Dr. Heather Brown, and so many more. I see many manufacturers that make our lives so much better. All this two times a year; pretty neat.

Does ASCC fit in? You bet we do, we lend to the conversation, we bring to the table the practical side of the equation. Though it can be a little painful, it is worthwhile. Ask my friend Steve Lloyd. Can you imagine the fun watching Steve Lloyd fight the battle for us? I love it.

To those who already help us at ACI, thank you. For those sitting on the sidelines, get engaged and participate: make a difference.

Executive Director’s Message

Silica Rule Would Have Dire Implications

Bev Garnant

On August 30 OSHA released a new proposed silica rule. They are presently seeking input about the feasibility of the proposed standard. ASCC is partnering with a Construction Industry Safety Coalition that will prepare a unified response to OSHA.

If this standard is put in place, with a PEL at 0.05 and an action level at 0.025, many contractors will be required to use respirators on a daily basis. It is curious why OSHA wants to push for new exposure limits now, when the number of deaths attributable to silica has dropped dramatically. Ten years ago the U.S. Center for Disease Control and Prevention and the National Institute of Occupational Safety and Health data showed that silica in 1968 was a contributing cause in just under 1,200 deaths in the U.S. By 1999 the number had dropped to less than 200. The most recent data, from 2007, shows a drop to less than 100. The construction industry has developed its own standards and regulations that have had a dramatic impact on deaths attributable to silica.

To respond to OSHA on this matter go to osha.gov/silica and click on Public Participation. At the bottom of the page click on Fact Sheet: How You Can Participate.

Decorative Concrete Council

Chris Klemaske, DCC Council Director

One of my favorite things about the Annual Conference is the opportunity to visit cities I otherwise might not see. Columbus, Ohio is one of those. The downtown location of the hotel was perfect, and the ability to walk to so many interesting places and good restaurants was a bonus.

The highlight of the meeting for me was meeting Sandy and Hal Henderson. Sandy was the driving force and inspiration for our DCC community project in Hanson, Kentucky in May. I have found Sandy to be one of the most generous and thoughtful people that I have ever had the pleasure of meeting. She and Hal had an art piece created that depicted our project in Hanson. They presented it to ASCC at the Conference, with a letter of appreciation from the U. S. Veteran’s Department, acknowledging our contribution.

Another highlight was speaking to the 2013 CIM scholarship winners. Obviously they are very intelligent young people, but in addition they are interesting, engaging and passionate about the concrete industry. If you have the opportunity to meet and speak with any of the CIM students at the World of Concrete, you will see exactly what I mean.

I met and spent time with so many new people this year, expanding my view of who is involved with ASCC. Many people I met are innovators and early adopters, but they take ideas and concepts even further. Best practices, safety and risk management, education and leadership were all highlighted at this meeting. I learned new things, discussed new ideas, and walked away from the event invigorated. Thank you to the ASCC staff and the Annual Meeting Committee for a job well done and a worthwhile conference.

Assuming the Risk

Todd Scharich, Decorative Concrete Specialist

The Decorative Concrete Hotline has been ringing off the hook with calls from contractors being asked to assume an excessive amount of risk. In some cases it is polished concrete contractors who are being asked to guarantee the appearance of the finished project, even though they are not placing or finishing the concrete. Other times it is an installer who assumes the risk of the old concrete when installing a decorative overlay. In both cases the callers are asking how they can separate their workmanship from the unknown base to which they are attaching their work. Paying attention to detail in contract writing can make a huge difference in the amount of liability you assume when taking on a project.

Working on a residential driveway replacement years ago, a small phrase that defined the depth of our excavation and base material kept our company from having to cover the cost of a driveway that was replaced twice due to excessive heaving. We found foundry slag sand that acted like lava rock at 24” below the defined base during the second replacement. Because our contract clearly stated our responsibility, the homeowner’s insurance paid us for both replacements and the full excavation of the foundry slag sand, a savings of over $30,000! An extra few minutes spent on a written proposal can save thousands of dollars of time and litigation.
Training Your Employees

Construction workers are a tough breed by nature, but tell your employees they have to spend a few hours in a classroom -- with a test at the end -- and you’ll see them roll their eyes and come up with a million excuses not to go.

OSHA expects all construction workers to be trained in the techniques necessary to do their job safely and effectively. OSHA requires employers to supply that training, in a language your workers understand. OSHA does not approve, certify, or endorse training programs, so it is up to the employer to enlist trainers who are certified in the course being taught.

On-line courses are an option. Employees sign-up for courses on their personal computers and sit through each training module, with a test they are required to pass to the next section. Is this effective? Yes, if the worker is computer-literate, has good reading and comprehension skills, and can sit for as long as it takes him or her to finish. Most computer training courses are designed to pace the student. For instance, if you sign up for an OSHA 10 class, the program is designed so you must participate for 600 minutes (10 hours) -- at a minimum! They won’t let you rush through the training and they won’t let you finish it in one sitting. OSHA limits their on-line training and their classroom trainers to a maximum 7.5 hours of training in one day.

In my opinion, real-time classroom training is the most effective for field personnel, especially if you have an instructor who has experience in the construction industry. Supplementing the training with photographs, videos, and props can help students who are visual learners. I’ve sat through many classes with our employees. When the instructor shares personal stories the students learn, participate, and share their own experiences.

Where do you begin if you don’t have a training program in place? The OSHA 10 Hour is a good place to start because it covers construction basics: a brief introduction to OSHA; crane safety; electrical safety; excavation safety; fall protection; materials handling and storage; PPE; scaffold safety; stairways and ladders; and hand and power tools. Your search for a good trainer should start with your insurance company. Many have certified trainers. Another option is to ask contractors in your area for a recommendation. If you employ union workers, call their locals to see if they offer training. Many locals work off of state grant funding and run regular classes for the OSHA 10.

Last but not least, keep records. Make sure you have a copy of the sign-in sheet for each class and make copies of each student’s certification card/paperwork. Finally, make a spreadsheet listing your employees and the training they’ve received. Training lists can be designed to show who had what training and when it needs to be refreshed.

Thin Concrete Cover Reduces Fire Resistance

Concrete cover requirements as protection of reinforcement for durability are stated in ACI 318-11 “Building Code Requirements for Structural Concrete.” But while most contractors are aware of these requirements they aren’t as familiar with ACI 216.1-07 “Code Requirements for Determining Fire Resistance of Concrete and Masonry Construction Assemblies.” The “ACI Fire Code” is part of the International Building Code (IBC). And while concrete cover protects the reinforcement from the weather, it also protects the reinforcement during a fire.

During a fire, the exposed concrete surface temperatures can be greater than 1500°F. The protected reinforcing steel inside the concrete would be slightly cooler but for temperatures of about 1200°F the steel strength is reduced by more than 50%. Concrete cover plays an important role in reducing the temperature of the steel and thus maintaining steel strength and member strength for a given fire resistance.

The ACI Fire Code includes Tables stating the (1) minimum concrete cover for reinforcement in concrete floors and roof slabs, (2) minimum concrete cover for nonprestressed and prestressed flexural reinforcement in beams, and (3) minimum concrete cover for reinforcement in columns. The concrete cover varies based on the fire rating, which varies from 1 to 4 hours. As the fire resistance rating increases, the required concrete cover increases.

But what happens if the concrete cover is less than that stated in the Tables in the ACI Fire Code? Fortunately, the ACI Fire Code allows a tolerance on “minimum concrete cover” by stating that the tolerances in ACI 117 apply. Thus a concrete cover that is 3/8 to ⅛ inch less (ACI 117 tolerances) than that required in the ACI Fire Code could still be acceptable. Also, the Tables in the ACI Fire Code are conservative and the Code provides analytical methods for calculating structural fire resistance and cover protection of concrete flexural members.

Most architects and engineers are not familiar with these calculations and generally base the fire rating on the Table criteria for minimum concrete cover. The Table values are conservative. Therefore, if there is a large amount of reduced concrete cover, the contractor would benefit by finding an engineer who can perform the calculations and show that the concrete member with the reduced concrete cover still meets the fire rating.

The ACI Fire Code allows finish materials to be included in the fire rating. Adding a layer of drywall or plaster could add 30 minutes to the fire rating. In addition, it is also possible to just add a cementitious mortar or coating to bring the concrete cover back to that specified. These options may be limited by the exposure (interior or exterior) and the architectural requirements.

Finally, another option is to consider applying a paint or coating that improves the fire resistance. Called intumescent paints or coatings, they retard heat transfer. The manufacturers provide data and recommendations that indicate how much paint or coating to apply to increase the fire resistance to the appropriate level.
Factors to consider include the cost of the coating and the labor cost of application, whether the paint or coating color must match the concrete color, and whether an additional exterior protective coating needs to be applied if it’s exterior concrete.

If you run into this problem give Ward or me a call. Over the years, we have seen a few instances of out-of-tolerance cover over reinforcement resulting in the contractor having to make repairs to restore the desired level of fire resistance. We can assist you in minimizing cost and schedule delays by using some of the strategies discussed for bringing the concrete back to the original fire rating.

**Engage Employees to Achieve Business Results**

Dana Galvin Lancour, FSMPS, CPSM, Barton Malow Co.

The talent war is upon us, and now more than ever it’s important that companies find a way to attract and retain the best and brightest. Fostering an active and engaged workforce committed to the company’s mission is challenging, however the rewards are well worth the effort. When leading your company, it is important to consider job satisfaction and employee engagement, as these items have a significant impact on your bottom line.

**The Challenge** – Today’s companies are challenged more than ever with four different generations in the workplace. Additionally, Forbes estimates that the millennial generation (born between the late 1970s and early 2000s) will represent 75% of the workforce by 2025. Therefore creating an environment that blends the different points of view and engages employees to work together in a cohesive manner is essential in ensuring a company’s success.

**How do you engage employees?** – It’s highly likely that your company already supports organized programs. These could include things as large as firm-wide employee meetings or as small as individual breakfast meetings with the President.

The best employee engagement programs support a company’s goals. Before developing a program, it is important to identify your objectives and your intended audience. Are you targeting new employees or looking for ways to make senior-level staff feel recognized and engaged? Knowing and understanding your audience will help in the development and longevity of your program.

Selecting engagement programs for your firm involves taking a good, hard look at how the organization communicates internally to engage and motivate its employees. Any company can organize social events, but what goal does that accomplish? A good employee engagement program does more than address the need for a social outlet at work: it supports your firm’s mission and reinforces your core values. Most successful programs are designed around activities already taking place within a company. This could include a lunch-and-learn or an employee town hall meeting. These types of activities reinforce a collaborative spirit and connect individuals across your organization. Below is a list of attributes that make great engagement programs:

- **Mission-Driven.** Programs should reinforce and reflect your corporate mission, vision and core values.
- **Maintainable.** Start a program that you can continue with your current resources including people, money, and time.
- **Relevant.** Not all programs work at all companies. Develop a plan that resonates with your unique blend of employees.
- **Promotable.** Make sure your program will gain traction. This will help your firm recruit and also retain employees.
- **Balanced.** A strong corporate culture is supported by a variety of programs to engage young, mature, new and experienced employees.
- **Consistent.** A solid program occurs regularly and reinforces your company’s mission and core values.
- **Measurable.** Make sure you have developed a way to measure return on investment such as employee engagement or retention levels, participation levels, or employee opinion survey results.

Engaging your workforce on a consistent basis is challenging. It requires enhanced communication efforts and leadership support, however the payoffs are certainly worth the effort. To discover more about how to achieve business results by engaging employees, check out this great article in Inc. Magazine: [http://www.inc.com/guides/2010/08/10-things-employees-want.html](http://www.inc.com/guides/2010/08/10-things-employees-want.html)

Dana Galvin Lancour, FSMPS, CPSM is the Director of Communications at Barton Malow Company and responsible for a broad range of communication activities. Connect with Dana at dglancour@bartonmalow.com or via Facebook and Twitter @galvinium.

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**HOT LINE QUESTIONS**

**CONCRETE CONSTRUCTION**

800-331-0668

Ward Malisch—wmalisch@ascconline.org

ASCC members have access to these toll-free numbers for assistance.

**SAFETY**

866-788-2722

ascc@ascconline.org

Todd Scharich—tscharich@ascconline.org

**DECORATIVE CONCRETE**

888-483-5288

**Webinars** (webinars begin at 3:00 p.m. CST)

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