Ask most anybody what “shiny” is and they can come up with a pretty decent answer. That is, until they talk with Brad Burns. So, before you answer too quickly, read on.

Plus: Solutions from frustration • High schools and colleges get floored • Love it or hate it, technology is here • The Butler did it. So can you. (And a whole lot more.)
With this issue, L&M Concrete News enters its 12th year of providing good content, good practice and good people.

When the idea behind Concrete News was first hatched, we knew we wanted to print more than just a product profile newsletter. We started Concrete News with a premise: namely, we don’t know it all, but in over fifty years as a company we have come to know a lot, and we know a lot of people who know a lot more than us. So, collectively, we attempt, with each issue, to share both fundamentals of concrete, new advancements, interesting projects and to introduce you to some of the great concrete experts we have come to know and work with over the years.

Articles in this issue cover a range of topics, as is typical of this magazine. Found within its pages you will:

1. Discover how a new product is developed from problem to solution with Lumiseal FX
2. Learn about how L&M contributes to the Green Building movement with polished concrete.
3. Meet Brad Burns, Executive Director of the Concrete Polishing Association of America (CPAA), and learn about the challenges and promising future of polished concrete
4. Be introduced to the newest in floor coatings: fast curing, incredibly tough, PERK!
5. Listen to the wisdom gained and shared by top concrete contractor, Mike Martin, president of Stief Concrete.
6. Meet L&M top-tier distributor, Tri-Supply and Equipment of New Castle, Delaware
7. Be updated on L&M’s many social media information outlets,
8. And finally, work on proper concrete surface preparation fundamentals for repairs.

All this is provided to you in an easy to read, attractive, convenient format, both printed in hard copy and delivered to your door, or easily and quickly found on our newly revamped website, www.lmcc.com

If concrete is your work, your livelihood, or your life, then L&M Concrete News is a must-have information source for you. But ultimately, we hope L&M will be and will continue to be the must-have product source for your projects, both now and well into the future.

Best regards,

Greg Schwietz
President, L&M Construction Chemicals
Frustration:
Clear sealers that ‘Blush’ on decorative concrete

Distributor counts on product born out of frustration

Rob Byrnes is the owner of DesignCrete of America, a specialty products distribution company located outside Syracuse, New York. As one of an estimated 325 active dealers catering to decorative concrete contractors on the East Coast, Rob has paid his dues over the years. Before founding his company Rob worked for five years learning the business from the slab up. He traveled to contractors’ projects around the country, training and supporting the sales of concrete stains, stamping equipment, and sealers to this increasingly important and always creative side of the concrete construction.

After founding DesignCrete of America, Byrnes approached L&M to carry many of their already formulated products which dovetailed into the decorative concrete market. L&M’s VOC compliant Dress & Seal water based products, Debond form release, penetrating repellents—Aquapel and Petrotex, and multi-purpose concrete repair product Duracrete were a few he started with.

Byrnes’ company evolved through the years of OSHA and EPA-driven VOC environmental regulation changes. This was a challenge to his industry. During this time of VOC change, L&M listened to the frustrations of the decorative concrete Industry leaders like Rob Byrnes looking for effective low-VOC, water-based sealer for exterior decorative applications. At the time there were many different sealers and waterproofing agents on the market, with many of them boasting varying degrees of effectiveness on exterior grey concrete surfaces: walkways, stairs, and exterior pavements. Larry Schwietz, founder of L&M, summed it up like this, “The big problem, both at the time and still to this day, was that your typical water based, low-VOC sealer will “blush white” when exposed to water.” Byrnes added, “Decorative concrete contractors want sealers to accentuate colored concrete, not blush.”

So the search for a suitable product was on. In short order, L&M brought the answer to market: LumiSeal FX. This exclusive L&M pure, non-yellowing acrylic top coat curing and sealing compound highlights and protects the beauty of decorative concrete, without whitening. It’s 100% effective, 100% VOC compliant, and 100% color stable in the presence of water.

Rob Byrnes also commented: “Since its introduction, FX has been a real winner for us. We sell a lot of it to the decorative contractors. We carry L&M products exclusively. We have dealt with other companies over the years, but we appreciate the high level of customer service and the consistency and reliability of L&M’s products. We can always count on L&M to come through for us.”

Try Lumiseal FX today for outstanding, non-blushing protection and beautiful concrete.

Lumiseal FX is another industry innovation from L&M.

contact: Rob Byrnes: Phone 315-423-4100 www.designcreteofamerica.com Marty Harrington, L&M: 518-490-2330
Omaha-based Vrana Construction recently announced that Omaha North High School earned LEED 'Silver' certification awarded by the U.S. Green Building Council (USGBC). The recently completed addition is the first facility in Nebraska to receive this certification under the LEED for Schools rating system, which was implemented by the USGBC in 2009.

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The project architect, RDG Planning & Design, encouraged North High students to participate in the preliminary design. Many of these design ideas were incorporated into the final plan. The project also incorporated sustainable building materials that produced a productive learning environment. Omaha Public Schools hired Vrana Construction as the construction manager for the project. The four-story, 32,092 square-foot addition primarily consists of science classrooms and labs but also serves the school's media technology and engineering programs. Specific features of the addition that helped garner the Silver certification include:

- The installation of 81 percent wood harvested from FSC-certified sources
- A two-story greenhouse, which opens onto a green roof that is completely covered by SRI-compliant material and can be used as a secondary teaching space
- Water-efficient landscaping where rainwater provides 100 percent of the irrigation needs
- Low-flow sinks and dual-flush toilets that help further reduce the school's potable water use by 43 percent
- The use of low-emission paints, coatings, adhesives, sealants, and flooring materials

L&M's FGS PermaShine Polished Concrete Floors Help Omaha North High School Win “Silver” LEED Award

L&M's FGS PermaShine system is a licensed, patented, dry concrete floor polishing and rejuvenation system that is available exclusively through L&M Construction Chemicals, Inc and its selected network of applicators.

For more information on the FGS PermaShine concrete floor rejuvenation system contact L&M Construction Chemicals at 402-453-6600 or visit www.fgs-permashine.com and www.lmcc.com

Our floor specialists can explain the unique features and benefits of this exciting option, which makes your new or old concrete floors look better than new.

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The Omaha North High School project incorporated sustainable building materials that produced a productive learning environment. FGS Polished Concrete surfaces are estimated to reduce long term floor maintenance by over 50%. All Polished Concrete Floors were sealed with L&M FGS Hardener Plus.

- FGS/PermaShine Concrete Floor System reduces VOC emissions and improves indoor air quality
- Development and implementation of an indoor air quality program to reduce the amount of contaminants released during the construction phase
- FGS PermaShine Polished Polished Concrete Process was used on the ground-polished sealer-hardening for the concrete floors in the engineering department, biology department, labs and general traffic hallway areas. On-going floor maintenance is estimated to be reduced by more than 50% by going to the FGS PermaShine polished concrete floors.

Jan Christensen, project director from North High School, worked on the new addition. Jan commented, “Eight years ago we asked ourselves 'why' something had to be done after assessing this school's potential and the fact that, in this city and this country, engineers and bio-tech students were not going into this line of study as they had in the past decades. We wanted to build a school and curriculum that got students in high school excited about pre-engineering, bio-tech, math and science. We aligned ourselves with the 'Project Lead The Way' (PLTW) leadership team. PLTW is the leading provider of rigorous and innovative Science, Technology, Engineering and Mathematics (STEM) education curricular programs used in middle and high schools across the U.S. STEM education is at the heart of today's high-tech, high-skill global economy.

"To remain economically competitive, our next generation of leaders (the students of today) must develop the critical reasoning and problem-solving skills that will help make them the most productive in the world. We felt this project was vital to the future of our students, the City of Omaha, and our global economy for America."

Over the years, Gene Haynes, principal of North High School, has seen much change to this magnet school. Haynes said, “We were very pleased with all the cooperation from all the entities working together. This was a great learning experience for everyone here at North High School. Sometimes projects like this can be very challenging and difficult because the very nature of LEED building is different. Our school won the award because of teamwork and tenacity to detail. We had to think out of the box and I witnessed great cooperation. Working with good people always makes a difference. The winners of this award will really be our next generation. We want to give this to our present and future [generations] so that our students and graduates can meet the demanding future expectations of this competitive global human resource market.”

Kylan Block from RDG Planning and Design, project architect on the North High School job said, “I found that working on this project was very stimulating and fun to watch others get involved in the planning. The students and instructors actually got involved in the planning stages. As a class project, the students were given an assignment to come up with a working plan. I found this a very unique project for RDG, in that the instructors and students were involved on every level. They took part in several design and planning meetings and a lot of what was originally discussed came to fruition as the end result of the finished building. The 'open' plan the students came up with showed and labeled each steel girder, each air-handling duct, each glass window, etc. to show future students all the parts that go into a building. It was inspiring and exciting to be part of this entire project."

Bill Krebs, project manager from Vrana Construction, the general contractor on the project said, “This project was a real team effort, with a lot of local talent working well together to make this happen. Vrana enjoyed working with some very talented people and the final product turned out to be an award-winner!”
What is Polished Concrete?
That question has plagued the concrete polishing industry for several years.Recently, the Concrete Polishing Association of America (CPAA), a trade association comprised of leaders from all aspects of the concrete polishing industry, has taken a huge step to providing a solid answer to that question and bringing stability to the industry.

The concrete polishing industry is still quite young. Especially when compared to other flooring systems or floor coverings - most of which have been around for several decades. As with most young industries, there is bound to be a certain amount of confusion surrounding the new technology and artisans crafting out a new trade. Concrete polishing is not different.

In the beginning...
Polished concrete was introduced into the United States by distributors, manufacturers, and contractors who polished natural stone. The goal was to create a mirror like finish through the use of bonded abrasives. It wasn’t long before some manufacturers and contractors offered cheaper, faster ways to create a similar looking product that couldn’t possibly offer the same aesthetics or performance. This obviously created massive confusion in the industry. Architects, trying to offer their clients a high performance flooring system, specified polished concrete and were often given simply a “shiny” floor. With no way of making a distinction between the good and bad processes, confusion and mistrust ascended to an even higher level. Architects began to traverse back to traditional floor covering and coatings, not because of higher performance, but simply more for consistent and predictable aesthetics. Adding to all of this mayhem was a retail market transitioning away from high end appearances (at least for the flooring) and moving more toward modern, industrial looks. Many of these retailers were aware of the lesser performance of lower cost versions of “polished concrete”. Even still, the “polished concrete” flooring could easily be justified since routine maintenance and occasional renovation was less than traditional floor coverings or coatings. Many consumers were not aware of the compromises made by the retail markets and requested higher quality aesthetics and performance for the cheaper prices demanded by the larger, competitive retail market. This, coupled with the fact that contractors were (are) fighting for market shares within the industry instead of selling against other flooring systems, has led to what some have perceived to be an all-time low for our industry.

The future of polished concrete
With all of this happening in the background, the concrete polishing industry has continued to grow and show tremendous outlook for the future. Especially in what has been arguably a stagnant economy. So how do we support this growth and preserve...
an industry that has great potential? Simply by restoring the consumer’s faith in the product. One step in that direction would be to create a vocabulary that architects, consumers and contractors could communicate effectively for the expectations of the end product. As you can imagine, this effort created its own set of challenges with varying opinions surrounding “shiny floors.”

From the inception of the CPAA, committees were created to address organizational issues as well as industry needs. One of these is the Standards Committee, which is comprised of a diverse cross section of leaders with a common goal and desire to see our industry grow. These individuals represent key areas of our industry - construction, manufacturing, and architectural. Therefore, as documents are created, they are born from a consensus of vast ideology of the concrete polishing industry. This brings us back to the earlier statement that the CPAA has taken a huge step toward offering an answer to “what is polished concrete?”

**Language that makes sense**

The CPAA recently announced to the industry an extensive list of definitions. This terminology will allow architects and general contractors to better communicate with polishing technicians. As previously stated, by gaining a clearer line of communication a more predictable end product can be achieved, thereby restoring the design community’s faith in polished concrete. Before we discuss the definitions, it must be understood that producing polished concrete is truly unique in nature.

Most flooring products are manufactured in a controlled environment and transported to the job site for installation. Even polished concrete’s distant cousin, terrazzo, utilizes standardized aggregates and colored matrixes installed by the technician for a more controlled installation process. Polished concrete on the other hand is produced, manufactured in a sense, directly at the job site. As such, the polishing technician is faced with a different set of variables that are subjective to each project. It has been said that, when processing concrete to a polished finish, “there are multiple ways to skin this cat.”

The polishing technician must have the knowledge to recognize the variables faced at the job site, and then have the leeway within the specifications to adjust to those demands. The polishing technician must also be held accountable for his craftsmanship and the end product. The CPAA offers a viable solution by creating clear, measurable benchmarks that the polishing technician must meet for each classification of polished concrete.

According to the CPAA, polished concrete is defined as “the act of changing a concrete floor surface, with or without aggregate exposure, to achieve a specified level of gloss using one of the listed classifications: Bonded Abrasive Polished Concrete, Burnished Polished Concrete, or Hybrid Polished Concrete.”

**Bonded Abrasive Polished Concrete**, the most sought after and misunderstood process, is defined as the multi-step operation of

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Floors “A” and “B” (next page) have equal specular gloss values. Floor A (above) has a lower Distinction of Image (DOI) than floor “B”. This is due, in part, to the quality of the concrete floor itself.

Floor “B” has the same specular gloss value, but has a better overall appearance and Distinction of Image (DOI) than floor “A”. Polished concrete floors will vary in reflectivity and clarity based on the condition of the underlying substrate, the expertise of the polishing contractor, and refinement of polishing.
Shiny 101: What is polished concrete?

mechanically grinding, honing, and polishing a concrete floor surface with bonded abrasives to cut a concrete floor surface and to refine each cut to the maximum potential to achieve a specified level of finished gloss as defined by the CPAA.

**Burnished Polished Concrete** is a common process used in the retail market. The multi-step operation of mechanical friction-rubbing a concrete floor surface with or without waxes or resins to achieve a specified level of finished gloss as defined by the CPAA. In most cases, the facility receiving this process has really, really good concrete that doesn't require much improvement to meet the consumer’s expectations for aesthetics or performance.

**Hybrid Polished Concrete**, another version of polished concrete, combines the two processes described above. This process is defined as a multi-step operation, using either standard grinding / polishing equipment, lightweight equipment, high speed burnishing equipment, or a combination of, to combine the mechanical grinding, honing, and polishing process with the friction rubbing process by utilizing bonded abrasives, abrasive pads, or a combination of, to achieve the specified level of finished gloss as defined by the CPAA.

**Film Coating** is the final way of creating a “shiny floor.” Although this application does not meet the CPAA's standards for polished concrete, the requirement of chemical resistance or small, low traffic areas may be some of the factors that dictate its use.

So which one is best? Which one offers the best performance at the lowest cost? That depends on the type of facility, intended aesthetic appearance, and projected amount of use and maintenance. Therefore, the CPAA offers a guideline as to the expectation of performance based on some common factors.

So, what the heck is “shiny?”

Notice that all processes are required to meet the “specified level of gloss as defined by the CPAA.” This is a very important aspect, because “shiny” is viewed, and measured in many ways. The CPAA has stated that a gloss measurement is comprised of multiple values.

A **Gloss Measurement** is a determination of specular gloss that incorporates distinction of image, haze and Rspec. Gloss, specifically specular gloss, is a measurement of the quantity of light reflected from the surface, or simply how reflective a surface is. Distinction of Image (DOI) is the quality of light reflected from the surface, or how clear an object appears in the reflection of the surface. Haze is a measurement that offers a value of the “halo” effect surrounding a reflection. Rspec is the measurement of the peak gloss value over a very narrow angle. Rspec values are subjective to a flat, or refined, surface.

By combining these measurements, and setting minimum limits for varying degrees of a finished floor, the polishing technician is held to a higher standard of performance. For instance, a Level 3 Finished Gloss requires a minimum sheen (specular gloss) value of 35GU and a minimum DOI value of 65. Level 4 Finished Gloss levels raise the bar higher with minimum sheen value of 50GU and minimum DOI value of 85. All measurements are required to be taken before the application of a stain protective product, commonly referred to as guards.

In order to meet the requirements of a Level 3 or Level 4 Finished...
Concrete Visions Inc. takes PERK! installation to new level of personalized creativity at OSU Student Union

The enlightened concrete floor coating

One of L&M's most recent product additions, PERK!, is really showing its colors lately. Oklahoma State University's new student union recently received a new PERK! floor, including a personalized OSU school logo. The job was installed by long time, certified L&M products installer, Concrete Visions of Tulsa, Oklahoma.

Concrete Visions president, Roy Bowman, commented about this project to the editor. “This job started out as a problem-solution challenge for our company. First, we had to have the PERK! colors custom made to match OSU's registered trademark logo. Next, we added aluminum oxide to the gray color to give it a metallic look, then a traction additive was chosen for safety for all the second and third topcoats. The look of the finished product had a lot of pizzaz!"

“The original specification called for bamboo wood to be laid on the stair plinth, but because of its stair's shape, a practical installation method was not found. As an alternative solution, the architect sent out bid request to polish and dye the stairs. Now, we have been installing FGS floors for nearly a decade, and we know from experience that not every floor is a candidate for polishing. Unfortunately, this was one of those exceptions. So, instead, we recommended PERK!”

PERK! is an advanced polylaspartic resin coating that competes very favorably with conventional epoxy coatings on a number of levels. Three of the most commonly cited benefits of PERK! over epoxy coatings include:

• Three times more durable and abrasion resistant than conventional epoxy coatings.
• Totally vibrant and non-yellowing colors.
• Quick install. Cures five times faster than epoxy sealers, which saves contractor installation labor and shortens facility downtime in operating plants.

For more information on the PERK! floor system, go to www.lmcc.com/perk

Want to know more about how PERK! compares to other concrete floor coatings? See the side-by-side comparison chart at lmcc.com/perk

For an installer in your area call L&M Construction Chemicals: 402-453-6600

Watch the Perk! Installation Video

www.youtube.com/watch?v=nh3wwrzwPjY
JV: Mike, please give me a brief background of Stief Concrete.

MM: Stief Concrete was actually founded in 1958 by Edward B. Stief. He remained the president until he passed away in 1973. The company is now a third generation business.

JV: Tell me about the evolution since 1958 and then after Mr. Stief handed the reins over to his successors.

MM: Stief was founded in 1958 mainly as a residential contractor doing mostly curbs, sidewalks, basement slabs, driveways and so on. After about five to seven years, the company started evolving into more and more commercial projects in the mid-to-late sixties and early seventies. The jobs became larger and larger and more complicated as the company grew larger.

JV: When did you start employment with the company?

MM: After Mr. Stief passed away, company ownership was transferred to Bonnie Stief-Hollinger, his oldest daughter and her husband, Jim. I started with the company in 1982 and Shawn Hollinger, Bonnie's son, in 1994. Company ownership was transferred to Shawn and myself in August of 2011.

JV: Can you tell me who your customers are and what concrete construction projects they represent?

MM: Sure Jim... They are basically medium to large sized general contractors who are involved in the commercial, industrial and institutional businesses and construction. We still do a small portion of our business with custom home builders and remodelers, but, by far, we have evolved into the commercial-industrial side of the business.

JV: How have you differentiated your company from other concrete companies in your region, and how are you positioning your company for growth and success, or survival?

MM: Since the late seventies until around 2008, our specialty was medium to large distribution centers with tilt-up walls. We specialize in a lot of tilt-up work, but unfortunately, after the recession hit in 2008-2009, that niche of our business almost completely disappeared in our tri-state area. Construction of new distribution centers got put on hold and expansion with most of our existing customers dropped off dramatically. It was a very hard time for us. We then focused into the 'public' arena doing a lot of sewage treatment plant work and city public works jobs. We had done a lot of this kind of work before, but not nearly to the degree that we do now. Right now, we still focus most of our efforts in this category.

JV: Mike, How did you survive through those tough years in 2008-2009?

MM: That was a very tough period. It's always difficult making a transition, even in good times. When the economy suffers, we suffer. It's that simple. When profits are almost non existent it's almost impossible. We made a lot of good decisions and some bad ones, too. We underestimated how bad it really was. We may have had unrealistic expectations, but we were more fortunate than a lot of companies. Sure, we had to let people go and downsize and get leaner. If the business isn't there, that's the only thing you can do.

Back in 2007 and 2008, we had as many as 90 people in our company. Right now, we have a full time employee base of 40 people in the field and about 10 in the office. We'll expand that number as jobs pick up again.

JV: Do you do a lot of 'repeat' customer business with the same relationships/owners/general contractors or do you see that business changing to a more impersonal level?

MM: Yes, we do. We are a relationship-driven company. We have a great rapport with all the people we do business with. We operate in a relationship type of business. If you're not good at what you do in this business, word gets out fast and your business will suffer.

For instance, Vic Scotese is our sales manager from L&M. Vic is always there when we need him and isn't afraid to go out to the job sites if necessary and help solve problems. He's also a link to our L&M distributor, Gatti-Morrison and their reps there also serve us very well. The whole L&M thing, in terms of relationships, is very good for us. And their L&M stocking levels are deep enough to get about anything we need. Being as L&M has a batch plant located nearby in Pottstown, we can get what we need pretty quickly.

JV: What words of wisdom would you have for other concrete contractors dealing with an ever-challenging business climate?

MM: In a typical situation, I look at this business as selling a “product.” From a product standpoint, there are tons more products on the concrete construction market than
“With the advent of the internet being as strong as it's become, there's a lot of companies that can advertise a lot of products that aren't really all that they say they are.” — Mike Martin, President, Stief Concrete Work, Inc.

there were ten to twenty years ago. With the advent of the internet being as strong as it's become, there are a lot of companies that can advertise a lot of products that aren't really all that they say they are. It's more important now than ever before to pick a concrete products distributor (like L&M) that you know is capable, qualified, has the right products that work, and will always be there for you. It's also extremely important to do your homework as to the products you need to do the job. There's a lot of products out there that are being advertised out there that aren't what they say they are. That's a big one for me. If I can't trust a product to work for me, it'll reflect on my integrity and could affect whether my customer is satisfied or not with our work.

With regards to a company doing their homework as to choosing the right sub-contractors to bring into the job, the schedule is of the utmost importance and how you do relative to that ultimately reflects on your company—good or bad. Everything today is being done in such haste. It's easier than ever for details and overall performance to slip through the cracks. I would recommend to other contractors to pay extremely close attention up front. Once you get involved in a job and the schedule starts, very few people want to hear you say “You know, I didn't have the time up front to find that out.” These are the two areas that have really changed drastically from the way things were years ago.

JV: What do you specifically do to increase the market share of your business?

MM: We get out there and visit with people as often as we can. Over the past fifteen or twenty years, the personal touch in this business has been lost. Because of many different reasons, including the proliferation of social media, more of these relationships are harder and harder to create.

We certainly do advertising and marketing, as most successful companies do, but nothing replaces putting our faces out there in front of other people. The personal touch is being lost in this business far too quickly. We keep all of our sales staff, our estimators and project managers, even me personally, out there in the field doing our very best to stay in front of our customers so that personal touch is always involved.

JV: What separates your company now from other concrete companies in your region during these difficult times?

MM: I strongly feel that would be our employee base. We have a very experienced and stable employee base, most of whom have been with our company in excess of ten to fifteen years --- some as long as 35 years. As a business man, that is a huge factor. Getting to really know your employees, giving them the opportunity to know and learn how we work as owners and managers is a strong factor in our employee model.

We also never forget that we are in a competitive, service oriented industry, which takes good, skilled people to make things happen. Many of my competitive company owners have shared with me over the years that their companies have a crippling-high turnover and they're constantly fighting this battle of locating, hiring and re-training people over and over again. We never forget that the people who work for us are the company. We want good people who trust us and we trust them to do the job. For me, personally, this is probably the largest issue that other companies can and must have to be successful.

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To learn more about L&M’s complete line of Concrete Construction Products, go to www.lmcc.com or call 402-453-6600

www.youtube.com/watch?v=VTd_8nSUEZU
As a leading concrete chemicals manufacturer, L&M Construction Chemicals knows that connecting with our customers is of utmost importance. We spend a lot of time listening to our customers, enabling us to better understand what you face in the world of concrete day-to-day.

You told us you want better product education. You told us you wanted better community built around your projects, supporting you on the really tough jobs. You told us you want product documentation available in multiple formats, when and where you need it, even off-hours. You told us you wanted more “How-To’s” for products. We’ve listened to you.

Like the world of concrete, the world of conversation evolves. New technologies bring us new tools of communication, augmenting traditional channels. Sure, a phone call usually works to get an answer, but what if you get voicemail? Worse, what if you’re working off-hours, and you’ve hit an impasse? Who is available to help you at 2 in the morning when you need answers? What resources can you rely on for solutions?

We’d like to introduce two new concrete chemicals resources and one greatly enhanced resource: our L&M Facebook page, our L&M YouTube Channel, and our re-designed L&M Web site, www.lmcc.com. Resources that you asked us for, geared around your questions.

Facebook
You asked us to build an online community around our products where you can interact with our Regional Sales Managers. L&M’s Facebook page is a terrific resource for architects, engineers, distributors, and contractors to do just that. On L&M’s Facebook page, you will discover a trove of helpful resources: videos, conversations, and product-related information designed to help you make more money in less time. The stuff you need to get your job done. Our Regional Sales Managers check the L&M Facebook page regularly and converse with our customers, building community around getting the job done right. Facebook is a terrific way to learn, inform, and easily connect with others.

www.facebook.com/LandMConstructionChemicalsInc

Please take a moment to add your input to the conversation and to ‘Like’ us on Facebook.

YouTube
You asked us for more videos. We listened and took action. Everybody knows that nothing explains things the way video explains things. That’s why we launched L&M’s YouTube Channel.

www.youtube.com/user/lmccvideos

On our YouTube Channel, you will find installation videos, how-to videos, and product videos. These are designed to educate you about our products, and to help you make an informed decision about your project before you spend money. Be sure to check our YouTube channel regularly as we continue to add more videos.

Updated website
Finally, you asked us for an easier-to-navigate Web site, one that conforms to mobile devices like iPhones and tablets. You asked us to speed it up, enabling you to find what you’re looking for faster than ever before. You also asked us for better search results. We listened and redesigned www.lmcc.com.

From project initiation to full production, L&M’s new Web site focuses exclusively on the end user. Its primary objective is to help you find what you need immediately. You’ll experience this through its simplified navigation, enhanced readability, and new, human-centric search capability. We encourage you to check out our completely redesigned, user-friendly L&M Web site at www.lmcc.com.

And in case you wondered, for the “I hate technology!” group, and it’s a large one, real people still answer the phone at L&M.

USA 800-362-3331 • Worldwide 402-453-6600

Please let us know what you think and how we can serve you in our partnership to better our world through better concrete.

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Back in 1998 Neal Messick, Dave Curran and Keith Baker were employed by one of the nation's largest construction equipment rental companies. This company also sold concrete construction chemicals to area contractors. Rather that work for a nationally-based company with over 8,000 employees, these men decided to join together as principal partners to form a regional company in which personalized service and close relationships with their customers were their top priority.

During these early years they met Vic Scotese of L&M Construction Chemicals, Inc. Vic knew about Neal, Dave and Keith’s decision to form their own company and immediately began talks of their becoming a distributor. Vic made them an offer they couldn’t refuse and laid the mortar and bricks to make them a preferred L&M products full line distributor. Fourteen years later, Tri Supply has grown to be one of the largest and most successful L&M distributors in their region.

In addition to being a full line concrete construction supplies distributor, Tri Supply & Equipment also carries a complete line of masonry products, excavating and erosion control products, and safety equipment. It also sells and rents construction equipment such as excavators, backhoes, and skid loaders. Currently Tri Supply has grown to over 30 employees. Their main facility is located in New Castle, Delaware with a second thriving location in Salisbury, Maryland.

Messick recently talked about the importance of the three owners’ relationship with Vic Scotese and L&M. “Vic’s 20 plus years in the industry has given him valuable experience in our business. We owe Vic a lot for his friendship and help in getting us started. Back in 1998, we were the little fish in a big sea. Getting a line of credit with vendors and establishing ourselves for a business loan with the bank was pretty tough. Vic went out of his way for us and vouched on our behalf to the owners of L&M. We will never forget what he did to help launch our company.”

Neal continued, “A few years ago when the construction industry went into decline, we and many companies associated with this industry suffered. We know that some actually went bankrupt or closed their doors. We were lucky because we have a lot of loyal customers and solid relationships with those customers that helped us weather the downturn. In addition, many of our vendors helped us get through. Sure, we had to downsize, close satellite locations and trim employees, but we used that time as one in which we reorganized to become a stronger company, showing healthy growth in the past year. Poised as a leaner and more efficient company, we look forward to 2013 with much optimism. We sincerely thank Vic and all the people we deal with at L&M Corporate for helping our business succeed.”

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I've read all these articles on how great certain concrete repair products are and how they promise miraculous results, but despite these claims, repairs often fail. Why is that?

There are several determining factors that influence whether or not a concrete repair will be successful. Without these issues being addressed, failure is typically the result. The most common is poor analysis of the repair area.

**Proper Analysis: Why did the failure occur in the first place?**

Larger repair projects require that methods of extreme accuracy which test the quality of the base concrete. This is necessary in order to avoid repeating the costly repairs that fail once again due to a poor quality base concrete. The preferred method is to take in cores of 3-4 inches diameter around the failure areas. These cores should then be analyzed by a qualified petrographer who will microscopically examine the concrete for the precise reason for the original failure and to determine the soundness of the base concrete to be repaired.

Then, a number of questions should first be answered. First of all, one must determine the owner's expectations and at what level of usage the floor is expected to perform. For example: Wheeled traffic, cart traffic, exposure to high abrasion, to impact, to chemical attack, etc. Are aesthetics important? What are the time parameters for turnaround of the repair area and a return to service?

**Q: Specifications are often vague on how to properly prepare a surface which is scheduled to receive a repair material. We have a large project which requires repairs from spot patching to sections that require overlay products. What do you recommend for surface preparation on floor repairs?**

**A: Preparation:** Your odds for a successful repair are directly proportionate to the quality of the preparation and the quality of the base concrete. Once the quality of the concrete and the owners' expectations are known, proper techniques must be followed in order to have a long lasting repair. In all cases, the method chosen must remove substandard concrete to expose good quality concrete.

**Good practice surface preparations include:**

1. Where repairs are necessary in the middle of a slab, thickening the edges of the repair area is a must. This requires the contractor to saw cut the perimeter of the area to be patched slightly deeper than the rest of the repair area. The center of the repair area is then bush-hammered down to sound concrete. A minimum of ¼” in depth is the normal standard.
“Successful repairs are directly proportionate to the quality of the preparation and the quality of the base concrete. Once the quality of the concrete and the owners' expectations are known, the proper techniques must be developed in order to have a long lasting repair. In all cases, the method chosen must remove substandard concrete to expose good quality concrete.”

Q: What's the best method to use for bonding small area repairs?

A: For small repairs, after mechanical preparation has been completed, surface saturation with water is the first step in creating a strong bond line. In most situations it is advisable to saturate the repair area the night before, or at least many hours before the product installation by means of pressure washing or ponding of the surface with potable water. After a saturation of water, the area must remain wet. The next day, or just prior to installing the repair material, remove any excess, ponded water. The concrete is now what is referred to as “SSD,” that is: Saturated Surface Damp. This is a very important step in the process as it prevents a thirsty base concrete from pulling the water out of the repair mortar, thus weakening the repair material.

The second step in assuring a proper bond is to prepare and install a bonding slurry. A bond slurry is often times accomplished simply by using a scrub coat of the repair mortar itself. We recommend this procedure when we know that the repair material contains polymer additives, as is the case with L&M’s Duracrete. An alternate method is to create your own bonding slurry simply by mixing one or two parts of Portland cement with one part of L&M’s Everbond, acrylic bonding agent. In either case, the slurry coat should be scrubbed into the repair area by means of a brush or stiff bristle broom. This scrubbing action is quite important to the success of the repair. Do not allow the bonding slurry to dry before application of the patching material. If this happens, reapply more bonding slurry mixture.

Q: Is there a repair mortar that will handle a wide variety of heavy duty floor repairs, including a complete overlay? Can any of these repair materials be used to create a polished concrete appearance?

A: Repair mortars come in a wide variety of types and performance capabilities. The one product that meets most floor repair scenarios you describe is our L&M’s Durafloor HP. This product will rapidly gain strength in just one day and allow the owner full use of the repair area within a short period of time. If the project involves polishing of the concrete, Durafloor HP will polish very nicely the day following placement.

Durafloor HP is an excellent choice for performing large floor overlays where the owner is looking for a completely new surface on the concrete. This product is self-leveling when properly mixed and installed.

Special surface preparation for Durafloor HP applications are required when scheduled for polishing. To these surfaces, the saturation process described above is not recommended. Instead, after a proper mechanical surface preparation of a minimum of shotblasting, apply a single heavy coat of L&M Epoxy primer and bonder. While the epoxy resin is still tacky, broadcast into the resin to saturation kiln dried, coarse sand. After the epoxy bonder has set a minimum of six hours remove by vacuum all loose and unbonded aggregate to produce a dry, sanded surface. To this surface install properly mixed Durafloor HP, leveled using a gauge rake set for the desired thickness. This will result in a finished floor appearance without the need for troweling. Durafloor HP is self curing, but it may be necessary to protect the surface during installation from excessive air movement to minimize plastic shrinkage cracks. After curing overnight, Durafloor HP is ready for the FGS/PermaShine polishing process.

Bill Butler is a sales and tech rep for L&M Construction Chemicals. He has worked in the concrete industry since 1976 and has been involved with ready mix trucks, concrete admixtures and construction products for the concrete industry. His approach to helping contractors and installers “do things right the first time” or when necessary “doing things right the second time” is to ask good questions, be thorough, use common sense and logic.

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Find answers to your questions:
Did you know that there are ConcreteNews articles dating back to the year 2000 online? (That’s a lot!) Search articles by keywords and get the concrete answers you need anytime, anyplace. Get them all at www.lmcc.com/concrete_news
Find Bill and Win an Apple iPad Mini!

There’s a hidden picture of Bill Butler (See pg 15) in the photo below.

Give us Bill’s coordinates (Like A-1 or B-17) to be entered into the random drawing of correct answers.

Put your answer on the reply card and mail it to us or enter online at www.lmcc.com/contest for your chance to win a brand new 16 gig Apple iPad Mini.

Random drawing of correct answers to be held on May 31, 2013. (If you don’t win the iPad, you might be one of two lucky Omaha Steaks winners!)

Of course, there are the usual disclaimers like employees of L&M Construction Chemicals can’t enter and that prizes may be substituted.

Enter today before you forget. Good Luck!

Enter with the enclosed reply card or online at www.lmcc.com/contest