Illinois Ready Mixed Concrete Association

Free Promotion Webinar Series Schedule,
Titles, and Descriptions

1. ***How to Design Concrete Parking Lots per ACI 330R-08 The Guide For The Design And Construction Of Concrete Parking Lots***

Speaker: Luke McHugh P.E.
Senior Director, Local Paving National Ready Mixed Concrete Association

Date: February 3rd, 2021

Webinar Description:
ACI 330R-08 by the American Concrete Institute is the industry standard for the design and construction concrete parking lots. This standard for concrete pavements provides the guidance to develop efficient designs for residential, commercial, industrial, warehouse, and manufacturing projects that are typically overdesigned using highway design methodology. The overdesign unnecessarily increases the initial construction cost and, many times, disqualifies concrete as a viable pavement option. By using proven design techniques and appropriate details, a designer can develop an economic and sustainable concrete pavement section that will perform for many years. This seminar will provide instruction on how to design and detail concrete pavements used in parking lots by considering the traffic loads, soil conditions, concrete properties, and resulting pavement stresses.

2. ***How to Design Industrial and Light Duty Parking Lot Asphalt Pavements***

Speakers: Mike Harrell Principal Engineer
Applied Research Associates

Mike Ward Operations Manager
Rabine Paving Group

Date: RESCHEDULED to March 25th, 2021

Webinar Description:
The presentation will cover structural asphalt design and touch upon mechanistic design concepts. We will walk through the concepts of asphalt pavement design as they apply to parking lot applications, both for heavy and light vehicle parking. The presentation will demonstrate the steps to determine appropriate inputs for traffic, materials, and site conditions and it will discuss the resultant structural layer coefficients and final structural number sufficient to handle the intended application. Also covered in this presentation is what local industrial buildings are doing for asphalt maintenance and the costs associated with it. You will learn about how businesses determine when their parking lots should undergo maintenance.

3-Part Webinar Series:
This 3-part webinar series will be comprised of 3 different 45-minute webinars on 3 different dates focusing on concrete ability to meet current LEED requirements and how concrete can contribute to lowering CO2 emissions. You will also learn about new technologies being utilized in concrete to be more environmentally responsible.

3. ***Part 1 Concrete's environmental impacts and ability to impact a company's Environmental Social and Governance Goals***

Speaker: Luke McHugh PE
Senior Director, Local Paving National Ready Mixed Concrete Association

Date: March 9th, 2021

Webinar Description:
In this webinar you will discover how choosing a concrete parking lot or using concrete on a project can achieve a variety of LEED Credits as well as increase the Environmental Social and Governance Scores for your clients. Today companies are tracking running their business based on their ESG strategies and are not aware how concrete can help them reach their ESG goals. LEED required Environmental Product Declarations will also be discussed. The difference between Life Cycle Assessment (LCA) and Life Cycle Cost Analysis (LCCA) of concrete pavements will be highlighted in this webinar.

4. ***Part 2 Portland Limestone Cement : 'Equivalent' performance to Type I/II with a Smaller Carbon Footprint***

Speakers: James Palmer Votorantim Cimentos St Marys Cement
Technical Services Engineer | Illinois & Wisconsin

Marvin Obermeyer, PE, LEED AP, FASCE
Technical Services Manager Buzzi Unicem USA

Date: March 17th, 2021

Webinar Description:
What is Type 1L Cement (Portland Limestone Cement) and how does it compare to 'Traditional' Type I/II cement, When 'Equivalent' is really better, & how to check/update your specifications (it may already be in there).
Have you heard of Type IL, PLC, or GUL? Type IL has a higher limestone content than the Type I/II cement that is most common in the market. This presentation describes Type IL (a.k.a. PLC, GUL) cement, how it is engineered to achieve 'equivalent' performance to Type I/II while being more environmentally friendly, and the key differences that could mean Type IL is a better fit for your projects. Portland-limestone cement (PLC) has been around for about 50 years though it hasn't yet achieved widespread usage in the US (Canadian & European markets have been using it for over 10 years). It was recently introduced to the Chicago market (noting limited quantities have been previously used in Illinois).

This presentation will provide a broad overview tailored to engineers and specifiers to address the topics above and as well as relevant aspects of the cement manufacturing process, Carbon Footprint reductions (including SCM mixes; e.g. GGBFS/Slag & pozzolan/fly ash) & applicable LEED sections. Guidance will also be provided for determining if your current specifications allow for Type IL cement and what should be included if not (Type IL is covered by ASTM C595 / AASHTO M 240 *Specification for Blended Hydraulic Cement;* Note Type IL is also included various National Standards such as ACI 301 & 318, FAA, AIA).

5. ***Part 3 How Specifying CarbonCure in your Parking Lot Concrete Can Lower CO2 Emissions***

Speakers: Allison Palmer, Market Development Manager, CarbonCure Technologies

Ryan Cialdella, Ozinga, Vice President of Customer Development

Date: April 7th, 2021

Webinar Description:
Did you know that embodied carbon (the carbon footprint of building products and construction) is expected to account for almost half of total carbon emissions from new construction over the next 30 years? Did you know that concrete - by virtue of being the most abundant man-made material on the planet - is typically the largest contributor to embodied carbon on any given project? This webinar will outline the difference of embodied carbon versus operational carbon. It will explore the Structural Engineer's 2050 Commitment (SE2050) and the sustainable shift among the building & design community. Lastly, the webinar will introduce an innovative solution to reducing embodied carbon in concrete - the CarbonCure Technology.

CarbonCure beneficially repurposes carbon dioxide to reduce embodied carbon without compromising concrete quality or competitiveness. Over 7 million cubic yards of concrete made with CarbonCure have been supplied from over 300 concrete plants. CarbonCure's success is due to the commitment concrete producers have made to build a better future. CarbonCure has proudly partnered with Ozinga in Illinois since 2017.In that time, Ozinga has reduced over 13,000 metric tonnes of carbon through 1 million cubic yards of concrete, including pavement and parking lot applications. The company's commitment to utilizing CarbonCure aligns with its strategic sustainability message of "providing a product that benefits the earth and its natural resources." (Ozinga.com) ***Learn how you as an engineer can help improve your clients or your companies Environmental Social and Governance Score by utilizing CarbonCure in your interior and exterior concrete pavements.***

6. Fibers in Concrete: Benefits, Applications, and Dosage Rates

Speakers: Larry Kaiser, P.E. Sr. Project Manager Engineering Design and Infrastructure
GCP Applied Technologies

Matt Norman Midwest Sales Manager
Concrete Fiber Solutions, LLC

Date: April 21st, 2021

Webinar Description:
The subject of fibers will be presented to develop your understanding of the product offerings available and how they can be applied in concrete. A comparison of different fiber types, applications, and limitations will be completed. This will include high and low volume polymeric (Synthetic) and steel fibers. An evaluation will be made for this product to be a total replacement to the typical usages of crack control steel for interior or exterior slab-on-grades (including pavements). A review of the value propositions of this lower cost alternative towards the Owner, Contractor, and Designer. This presentation will go through the history of steel fiber, the different types of steel fiber, design considerations and applications. I will also talk about the mixing, placing and finishing of steel fiber.

In addition, a slab on grade design software program has been developed utilizing ACI-360, PCA Design Guide, and Beam on Elastic Foundation criteria. A review of this software's capabilities as a design tool that incorporates the use of macro synthetic fibers as the sole reinforcement within the concrete section.

7. Concrete Overlays over Existing Asphalt Parking Lots

Speaker: Don A. Clem, P.E. (Colorado) Vice President Local Paving
National Ready Mixed Concrete Association

Date: May 5th, 2021

Webinar Description:
The performance life of asphalt surfaced parking lots can be extended by placing a bonded concrete layer on top of the existing asphalt. This technique has been used for many years for highway, street and parking lot pavements but still engineers and owners are unfamiliar with the process. This webinar will cover the publication entitled the Guide to Concrete Overlays of Asphalt Parking Lots and demonstrate the steps necessary to properly design and construct a concrete overlay.

Learning Objectives:

- Learn how to evaluate and assess an existing asphalt parking lot for a concrete overlay.

- Understand how to determine the thickness of concrete required to be placed over the asphalt.
- Learn the various construction techniques and how to determine the proper joint spacing.
- Discover which details and specification criteria are especially important for these projects.

8. What's in Your Concrete Specification and What Does It Mean?

Speaker: Scott Kelly, Director of Technical Services, Ozinga

Date: May 19th, 2021

Webinar Description:
Concrete specifications are loaded with ACI, ASTM, and AASHTO references that should be followed on the projects when concrete is being placed. Understanding what each one of these standards actually means and what is important in them can be difficult. This webinar will review some of these standards to increase your knowledge. We will also touch on the following items that should be listed in your specification like listing the contractor as responsible for hiring the lab of record to take cores, allowable fly ash, portland limestone cement, and slag replacement levels, concrete strength, w/cm ratio, slump and air content for parking lot pavements, aggregate requirements, admixture/fiber requirements, addressing cylinder storage on site, discussing cold weather and hot weather concreting, preconstruction meeting to discuss jobsite testing, special testing requirements (e.g. ASR), and performance vs prescriptive mixes.

9. Concrete 101 – The Basics of Concrete

Speaker: Theron Tobolski, Assistant Executive Director
Illinois Ready Mixed Concrete Association

Date: June 2nd, 2021

Webinar Description:
This webinar educates you on everything concrete from all the different materials that go into concrete like cement, fly ash, slag, portland limestone cement, admixtures, fibers and aggregates. We also cover what causes different issues that can happen to concrete like cracking and scaling. Best practices for concrete like curing and sealing concrete and not exceeding the designed w/c is also discussed. What causes low cylinder breaks on a project is highlighted in this webinar. This is a webinar that every engineer who designs concrete should attend.

10. Full-Depth Reclamation with Cement Using a Ready Mixed Concrete Truck

Speakers: Don A. Clem, P.E. (Colorado) Vice President Local Paving
National Ready Mixed Concrete Association

Jonathan Pease CEO/Founder
Rock Solid Stabilization and Reclamation

Date: June 16th, 2021

Webinar Description:
Full-Depth Reclamation is a method of pavement reconstruction that utilizes the existing asphalt, base, and subgrade material to produce a new stabilized base course for a chip seal, asphalt, or concrete wearing surface. It provides substantial savings over the conventional remove and replace construction option. This webinar includes the following learning objectives:

- Understand the definition of Full-Depth Reclamation
- Advantages of the FDR process
- How to determine the appropriate cement content target
- FDR construction process
- Cement slurry delivered in a ready mixed concrete truck

11. Concrete Pavement Myths

Speaker: Luke McHugh P.E., Senior Director, Local Paving
National Ready Mixed Concrete Association

Date: July 14th, 2021

Webinar Description:
We will review and debunk some of the myths about concrete pavements. Topics include more cement is better, we need to add steel in concrete pavement, adding steel increases load capacity, dowels are required at all joints, a thicker aggregate base helps support heavier loads, my pavement failed because it cracked, concrete is more expensive than asphalt, and more.

12. New Concrete Industry Promotion on Concrete Trails

Speaker: Jon Hansen Sr. Vice President-Local Paving
National **R**eady **M**ixed **C**oncrete **A**ssociation

Date: July 28th, 2021

Webinar Description:
In 2020, trail parks and similar outdoor settings saw a 50% usage increase across the country. Illinois has almost 1,000 projects ranging from less than $50,000 to over $100M where trails are being constructed or will be constructed in the coming months. Concrete's natural durable

properties versus other paving materials make it the obvious choice for a long term, maintenance free, and sustainable amenity enhancing the quality of life for any community. Learn how to properly design and construct concrete trails according to the ***Guide to Concrete Trails*** by the National Concrete Pavement Technology Center for all types of recreational trails, including those for biking, running, and walking, and of other pathways such as cart paths on golf courses.

If you would like to receive an invite for these webinars, please email Theron Tobolski of the Illinois Ready Mixed Concrete Association at ttobolski@irmca.org. A 1 Hour PDH Credit is available for attending each webinar.

Also please fill out the survey that was in the email along with this attachment.

Thanks,

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