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ACI Publishes Code Requirements for Low-Carbon Concrete

ACI, through the work of ACI Committee 323, Low-Carbon Concrete Code, has released ACI CODE-323-24, "Low-Carbon Concrete—Code Requirements and Commentary." The Code provides provisions for concrete where reduced global warming potential (GWP) is required. The Code was developed by a consensus process and provides commentary along with references for the user desiring to study individual questions in greater detail.

The Code may be adopted as a standalone code or can be used in combination with a structural design code or lowcarbon material code adopted by an authority having jurisdiction. The Code is in a format that allows reference to a set of chapters based on the structure type. Adoption would include all of Chapters 1 to 4, the applicable Chapter(s) of 5, 6, 7, and/or 8, plus Appendix A. This Code is written in a format that allows reference without change to its language. Therefore, background details or suggestions for carrying out the requirements or intent of the Code provisions cannot be included with the Code itself. The Commentary is provided for this purpose.

The Code employs a carbon budget approach and emphasizes the use of environmental product declarations (EPDs) for benchmarking, aiming to standardize methodologies for reducing carbon emissions associated with concrete construction.

"In the past, standards for lowering carbon in the built environment have been difficult to define, and this Code represents a giant leap forward," said Matthew Adams, Chair, ACI Committee 323. "The Code provides references for various structures so that the guidelines can be applied to any project. Committee 323 members did a great deal of work to produce this Code, and it is just a beginning, as future versions will provide even more guidance to everyone designing and building with reduced-carbon concrete."

ACI Committee 323's mission is to develop and maintain code requirements for low-carbon concrete. An on-demand course, ACI CODE-323, Low-Carbon Concrete Code, is also available from ACI explaining the development and purpose of the Code.

New ACI 562 PLUS Repair Subscription Available

ACI announced a major upgrade to its concrete repair resources. On November 12, 2024, the ACI Concrete Repair Subscription transitioned to the new ACI 562 PLUS Repair Subscription. This change is part of ACI's ongoing commitment to providing the most advanced and user-friendly resources for professionals in the concrete industry. ACI 562 PLUS Repair Subscription will offer all the benefits of the existing Concrete Repair Subscription, including digital access to more than 200 repair-specific documents, such as code requirements, commentary, specifications, guides, reports, symposium volumes, and ACI University on-demand courses. Additionally, subscribers will receive all-new concrete repair content as it is developed and released.

The key advantage of ACI 562 PLUS Repair Subscription is its integration with the PLUS platform and the already existing ACI Repair Subscription. This unified platform will streamline access to essential resources, making it easier for users to find and use the information needed for both concrete repair and structural concrete building projects.

ACI 562 PLUS features full digital interactive access to MNL-3(16), "Guide to the Code for Assessment, Repair, and Rehabilitation of Existing Concrete Buildings," with functionality allowing subscribers to make digital notes alongside ACI CODE-562 provisions and commentary, as well as the Guide to the Code. The digital notetaking functionality allows subscribers to create up to 10 unique sets of notes for potential sharing with other ACI 562 PLUS Repair Subscription users.

If you're already subscribed to the ACI Concrete Repair Subscription, your subscription will automatically transfer to the new subscription. No action is needed on your part you'll gain access to the new features as soon as they are available.

ACI remains dedicated to providing leading educational and technical content to support the concrete industry's ever-evolving needs.

ACI Announces 2025 Middle East Concrete Conference

ACI, along with the ACI UAE Chapter, will co-host the ACI Concrete Conference – From Gray to Green in Dubai, UAE, on February 12-13, 2025. The 2-day conference will be held at Kempinski Central Avenue, Dubai, UAE, and will explore the cutting-edge practices and innovations driving the concrete industry toward a carbon-neutral future.

The ACI Concrete Conference – From Gray to Green will bring together industry leaders, local and international experts, and government officials to exchange their experiences and discuss innovative and emerging technologies in the concrete industry.

Conference session speakers will include Fouad Yazbeck, FACI, Conference Emcee; Michael J. Paul, FACI, ACI President; Frederick H. Grubbe, ACI Executive Vice President; Abdeldjelil Belarbi, FACI; Antonio Nanni, FACI, ACI Past President 2023-2024; Dean Frank; Mufid Samarai;

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Khaled Nahlawi; Kasem Mayamh; Carol Hayek, FACI; Moneeb Genedy; Ahmad Khartabil; Alireza Biparva; Muhammad K. Rahman; Tarek Alkhrdaji, FACI; and Calum Perey.

For more information, visit **www.** concrete.org/middleeast/mec.

ACI Establishes the Michel Bakhoum International Collaboration Award

The Michel Bakhoum International Collaboration Award, founded in 2024, honors the memory of ACI member Michel Bakhoum, an internationally known structural engineer, researcher, and educator.

The award is given for outstanding contribution to international collaborations for the progress of knowledge on reinforced and prestressed concrete and development/ application of ACI codes, specifications, and guides worldwide for innovations in design and construction practices of concrete structures.

Born in Cairo, Egypt, in June 1913, Bakhoum was recognized as a leader in the field of structural engineering, particularly in Egypt and the region. His vast knowledge of design and construction methods served him in the roles of structural consulting engineer, professor, researcher, and code developer.

Bakhoum received his PhD in civil engineering from Cairo University, Giza, Egypt, and his second PhD from the University of Illinois Urbana-Champaign, IL, USA. He completed post doctoral studies at Columbia University, New York, NY, USA, focusing on the theory of elasticity and applied mathematics.

Bakhoum taught at Cairo University from 1937 until he passed away in 1981. He was Head of the Reinforced Concrete Research Laboratory from 1951 until 1958. Bakhoum also taught at Ain Shams University in Cairo and Assiut University in Assiut, Egypt. He authored many technical papers and the book *Structural Mechanics*. He also supervised several researchers for the degrees of MSc and PhD.

In 1950, Bakhoum started a consulting engineering partnership. The firm is currently known as "Arab Consulting Engineers: Moharram – Bakhoum" (ACE). ACE is one of the leading consulting engineering firms in Egypt and the Middle East.

Bakhoum was a member of several engineering societies, including as Fellow of the Institution of Structural Engineers and the American Society of Civil Engineers (ASCE) and as a member of the International Association for Bridge and Structural Engineering (IABSE) and the Egyptian Engineering Society. He also worked on many code committees with the Building Research Institute.

For more information about ACI's Honors and Awards Program, see p. 26.

ACI Committee 302 and ASCC Interior Slab Mixture with Type IL Cement Study

In conjunction with ACI Committee 302, Construction of Concrete Floors, the American Society of Concrete Contractors (ASCC) is seeking data on interior, non-air-entrained, troweled concrete slabs constructed with Type I/II and Type IL cement over the past 2 years. The requested data will include mixture proportions, cement mill certificates, aggregate gradations, and other parameters. The objective is to

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conduct statistical analyses to find opportunities for improving the constructability and quality of interior concrete flatwork. The raw data will be held in confidence and anonymized. For additional information on the study, the required data, and the analysis tool, contact Mike Hernandez, Technical Director, ASCC, mhernandez@ascconline.org.

NRMCA Begins Search for Association President

The National Ready Mixed Concrete Association (NRMCA) leadership will begin the important work of identifying the association's next president. By unanimous consent, the Executive Committee has named NRMCA Chief Financial Officer Joe Roche as Interim President, effective immediately.

Tim Cooper, Executive Vice President, Human Resources, has begun vetting executive search firms to interview and will select one firm in partnership with the Search Committee. To conduct this search with full transparency and efficacy, the Executive Committee has named the following industry executives to serve on the Search Committee for NRMCA's president:

- G. Carlton Golden Jr., Secretary/Treasurer, NRMCA Audit and Finance Committee; President, Builders Supply Company, Inc., Bossier City, LA, USA;
- Sarah Beasley, member, NRMCA Executive Committee; General Manager, Vulcan Materials Company, Norfolk, VA, USA;
- Heather Brown, Vice President of QC/QA, IMI, Nashville, TN, USA; former Director of CIM Program at Middle Tennessee State University, Murfreesboro, TN;
- Todd Dragna, Senior Vice President, Robertson's Ready Mix, Corona, CA, USA;



- Rodney Grogan, President, Western Operations at Dunn Investment Company; Past President, MMC Materials, Madison, MS, USA; and past Chair, NRMCA Board of Directors;
- Michael LeMonds, member, NRMCA Executive Committee; Chief Sustainability Officer and Vice President, Environment, Social and Governance, Holcim United States, Chicago, IL, USA; and
- Ben Olin, Chair, NRMCA Membership Small Producer Council; Concrete Technical Services Director, Dickinson Ready Mix, Dickinson, ND, USA.

The Search Committee will also include nonvoting ex-officio members Roche and Cooper to help facilitate the committee's activities. Central to the Executive Committee's approach in forming the selection committee was to ensure diverse perspectives, with a focus on a broad range of experiences and geographic representation.

The Committee in conjunction with the retained outside recruiting firm will recommend two to three candidates to the sitting Executive Committee, which will then select and recommend a candidate to the full Board of Directors for final approval.

For more information, visit www.nrmca.org.

Morris Dam Dedicated as National Historic Civil Engineering Landmark

The American Society of Civil Engineers (ASCE) recognized the Morris Dam in Los Angeles County, CA, USA, as a National Historic Civil Engineering Landmark. The Morris Dam is a concrete gravity dam that spans the San Gabriel River. Construction on the dam started in 1932, and it was completed in 1934. The dam is currently owned and operated by the Los Angeles County Department of Public Works.

The dedication ceremony and celebration of the dam's 90th anniversary was held near the Morris Dam and was hosted by the Los Angeles County Department of Public Works and the Los Angeles Section of ASCE. The event also included ASCE Past-President Marsia Geldert-Murphey, representatives from the San Gabriel Basin Water Quality Authority, and family members of Samuel Brooks Morris, the Chief Engineer of the Pasadena Water Department at the time of the dam's construction.

ASCE represents more than 160,000 members of the civil engineering profession worldwide and is the oldest national engineering society in the United States. It recognizes historically significant civil engineering projects, structures, and sites worldwide. More than 350 projects worldwide have earned the prestigious title for creativity and innovation; almost all are executed under challenging conditions.

"Water is our most valuable resource, and water

infrastructure like the Morris Dam is vital to every community. Dams are important as we see more unprecedented and shifting weather patterns, storing water to protect people and property during heavy rainfall and releasing it during droughts, providing reliable water supply," Geldert-Murphey said. "The innovative techniques and new methods used to build the Morris Dam helped advance dam construction practices, which has benefited the health, safety, and welfare of people all over the world."

The Morris Dam was built by the Pasadena Water Department and was the first major dam approved by the California State Engineer after the failure of the St. Francis Dam in 1928. This disaster led to the first-ever state regulations of dams. The dam was originally called the Pine Canyon Dam, and its design included an open joint between two of the dam's blocks to allow movement on a seismic fault under the dam.

The dam is credited with preventing millions of dollars in damage from the Los Angeles Flood of 1938, one of the

largest flood events to ever hit Southern California. It was sold to the Metropolitan Water District of Southern California in 1941. The Los Angeles County of Public Works took over ownership and operation of the Morris Dam in 1995.

In addition to its role in water conservation, the Morris Dam also first served as a Naval Ordinance Test Station during World War II. The dam's reservoir served as a testing ground for torpedoes, missiles, and other weapons used in submarine warfare. The improved weapons developed at the reservoir led the Navy to continue research and development of new weapons there until the testing facility was shut down in 1993.

The ceremony included the unveiling of a marker to honor the Morris Dam's recognition as a National Historic Civil Engineering Landmark.

For more information about ASCE's Historic Civil Engineering Landmark Program, visit **www.asce.org**/ **about-civil-engineering/history-and-heritage/historiclandmarks**.



Minnich Flex Shaft Vibrators

Built to exceed your expectations and outperform the competition. With results in mind, our vibrators are engineered for control and durability, ensuring a smooth and flawless pour every time. With more control over your results and a longer lifespan than other options on the market, our flex shaft concrete vibrators are the perfect choice for the professional looking to take their work to the next level.

