

Proposed ASTM standard will support FRP concrete

ASTM International's concrete and concrete aggregates committee (C09) is developing a proposed standard (WK73384) that will evaluate the tensile performance of fiber-reinforced concrete using cylindrical specimens with double-punch loading.

The proposed standard contains "pre- and post-peak tensile properties (that) hold great significance in fiber-reinforced concrete (FRC) and ultra-high-performance concrete (UHPC). These properties serve as the fundamental characteristics of FRC and UHPC, playing a vital role in determining the capacities and failure modes of structural members constructed from these materials," says, Shih-Ho Chao, ASTM International member and professor of civil engineering at the University of Texas at Arlington. He says that FRC and UHPC provide enhanced durability over conventional concrete, which "has the potential to encourage the adoption of these durable materials, thereby promoting sustainable development within society, particularly in terms of sustainable infrastructure."

This method is primarily based on the double-punch test (DPT). "The double-punch test, outlined in the proposed standard, utilizes a simple apparatus and procedure, providing a convenient method for obtaining these tensile properties. This test method is well-suited for routine testing purposes and exhibits low variability in its results," says Chao. According to Chao, the DPT is highly regarded as it has undergone extensive testing by various researchers across the world.

Chao says this will serve as a helpful tool for quality control purposes and as a guide for serviceability and strength design.

All interested parties (specifically departments of transportation, government agencies, FRC suppliers, fiber manufacturers, and researchers) are invited to contribute to the development of the proposed standard.

This effort directly relates to the United Nations Sustainable Development Goal number 12 on responsible consumption and production.

—Source: ASTM International

Pankow Foundation releases report on spandrel assemblies in glazed wall systems

The Charles Pankow Foundation has released the phase 1 report from grant 04-22, "Thermal Performance of Spandrel Assemblies in Glazing Systems Research Roadmap."

Glazed wall systems, such as curtain walls or window walls, form part of the building envelope and are commonly used in modern buildings. They comprise transparent, translucent, and opaque areas; however, because of the complex arrangement of materials and structural components that bridge the insulation, spandrel assembly thermal performance is often lower than assumed. This can contribute to building energy loss, condensation, and other performance issues.

The overall goal of this program is to provide the industry with a repeatable and accurate procedure for estimating the thermal performance of spandrel panel systems. Based on this physically validated simulation procedure, jurisdictions may choose to recognize the performance of spandrels in different ways, including requiring the use of the procedure when reporting performance or by setting targets independent from those of other opaque wall assemblies.

The program objectives in the short- to midterm are to provide research findings that lead to the publication of the design guide, "Design Guidance for Thermal Performance of Spandrel Assemblies in Glazed Wall Systems." The goals of the design guidance document are to provide shorter-term direction to improve existing practice and to inform codes and standards changes over a 10-year time span.

The overall project is divided into the following four phases:

- phase 1: design test program
- phase 2: physical testing and analysis
- phase 3: defining spandrel thermal performance requirements
- phase 4: preparation of design guidance document

The current final report is for the phase 1 design test program, and it is available at http://www.pankowfoundation.org/site/assets/files/2320/04-22_thermal_performance_of_spandrel_assemblies_in_glazed_wall_systems-1.pdf. Cofunding partners are being sought for the phase 2 testing and analysis program.

—Pankow Foundation

ASTM announces next step in digital workflow functionality with Compass Points

ASTM International has announced its newest product for improving digital workflow functionality through its new Compass Points tool. Compass Points is an online tool that provides users with the ability to highlight important components in standards, building a permanent link back to that data for multiple purposes.

The release of the new Compass Points tool follows a major investment into ASTM International's information technology infrastructure that has significantly enhanced the ASTM Compass product. With the newly improved platform, ASTM International provides users with improved and more flexible solutions so they can do more with their standards, especially when incorporating them into a variety of key workflow systems.

All Compass features are based on years of customer feedback and usage data and were built to help customers manage change and use technology to meet growing digital needs. Specifically, ASTM Compass enables users to switch between both HTML and PDF versions of standards; easily export and transfer content to internal workflow systems, standard operating procedures, or other platforms; access additional content from a variety of standards developers and associations; and easily identify changes to standards through ASTM Redlines, saving time and money; and create and share a unique and permanent URL.

To learn more about the enhancements to ASTM Compass, visit www.astm.org/compass.

—ASTM International

ACI names Grubbe new executive vice president

The American Concrete Institute (ACI) has named Frederick H. Grubbe, current president and chief executive officer of the National Precast Concrete Association (NPCA), executive vice president of ACI.

Current ACI executive vice president, Ronald G. Burg, will retire from ACI in August after 13 years of service to the institute. Grubbe will join the 148-member ACI staff at its Farmington Hills, Mich., headquarters on August 10.

Grubbe brings more than 25 years of not-for-profit executive leadership experience to the ACI. He has held positions at the Appraisal Institute, the American Fraternal



Frederick Grubbe

Alliance (formerly the National Fraternal Congress of America), and the Think First Foundation. He also served as director of strategic planning and special projects at the Million Dollar Round Table, along with positions at several other not-for-profit organizations.

In addition to this experience, Grubbe worked at the U.S. Department of Transportation as a special assistant to the secretary and White House liaison prior to serving as deputy administrator of the National Highway Traffic Safety Administration. In 1992, President George H. W. Bush appointed Grubbe deputy director of the U.S. Office of Consumer Affairs in the White House.

During his tenure at NPCA, Grubbe oversaw the continued growth and success of The Precast Show. As president and CEO, Grubbe served as an ex-officio board of directors and executive committee member, as well as NPCA Foundation president and ex-officio board member.

Grubbe is an active member of the American Society of Association Executives (ASAE), currently serving on the board of directors for ASAE Business Solutions, a for-profit subsidiary of ASAE. He also served as chair of the board of directors for the Association Forum of Chicagoland.

A Certified Association Executive (CAE), Grubbe received his master of business administration degree from Loyola University Chicago.

—Source: American Concrete Institute

ASTM specification to cover emerging cementitious materials

ASTM International's concrete and concrete aggregates committee (C09) is developing a proposed standard specification for a broad range of supplementary cementitious materials (SCMs).

Principal engineer at Sutter Engineering and ASTM International member Larry Sutter says that performance specification WK70466 will ease the adoption of new materials used for SCMs as established sources become less available.

"For a variety of reasons, historic sources of SCMs, like coal fly ash from electric power generation, are in short supply and new materials are emerging," Sutter says. "These new materials do not fall under existing specifications, leading to the need for new specifications. Rather than writing a new specification for every emerging material, we are writing a performance specification that can be used to cover the full range of them."

Sutter says that concrete made with SCMs can be less costly, more durable, and more sustainable than traditional portland cement. New specifications will allow these new materials to be used for more construction projects.

This effort directly relates to the United Nations Sustainable Development Goal number 7 on clean and affordable energy.
—Source: ASTM International

U.S. Department of Labor announces national emphasis program to reduce falls

The U.S. Department of Labor announced that the Occupational Safety and Health Administration (OSHA) has begun a National Emphasis Program to prevent falls, the leading cause of fatal workplace injuries and the violation the agency cites most frequently in construction industry inspections. The emphasis program will focus on reducing fall-related

injuries and fatalities for people working at heights in all industries. The targeted enforcement program is based on historical Bureau of Labor Statistics data and OSHA enforcement history. Bureau of Labor Statistics data show that of the 5190 fatal workplace injuries in 2021, 680 were associated with falls from elevations, about 13% of all deaths.

The program establishes guidance for locating and inspecting fall hazards and allows OSHA compliance safety and health officers to open inspections whenever they observe someone working at heights. An outreach component of the program will focus on educating employers about effective ways to keep their workers safe. If a compliance officer determines an inspection is not necessary after entering a worksite and observing work activities, they will provide outreach on fall protection and leave the site.

For more information about federally required fall protection, visit <https://www.osha.gov/fall-protection>.

—Source: U.S. Department of Labor

INDUSTRY CALENDAR

Event details are subject to change.

BEI-2023 "Sustainability in Bridge Engineering" Roma Eventi-Fontana di Fontana Trevi, Rome, Italy	July 17-20, 2023
CACRCS 2022 Parma, Italy	September 12-15, 2023
Greenbuild Walter E. Washington Convention Center, Washington, D.C.	September 26-29, 2023
PTI 2023 Committee Days Cancun, Mexico	October 3-6, 2023
ACI Concrete Convention Boston Convention Center and Westin Boston Waterfront, Boston, Mass.	October 29–November 2, 2023
AASHTO Annual Meeting J. W. Marriott Indianapolis, Indianapolis, Ind.	November 12-16, 2023
ASBI 35th Annual Convention Westin La Paloma Resort and Spa, Tucson, Ariz.	November 5-8, 2023
World of Concrete Las Vegas Convention Center, Las Vegas, Nev.	January 22-25, 2024
ACI Concrete Convention Hyatt Regency New Orleans, New Orleans, La.	March 24-28, 2024
PTI Convention Indianapolis, Ind.	April 14-17, 2024
ACI/RILEM International Conference on Cementitious Materials and Alternative Binders for Sustainable Concrete Toulouse, France	June 23-26, 2024
fib International Conference on Concrete Sustainability Guimarães, Portugal	September 11-13, 2024