LATICRETE Looks to the Future with 3D Printing Mortar Technology Advancements

3D printable mortar prototype will expand the company’s product offerings and significantly impact the future of the construction industry

August 21, 2019, Bethany, Conn. -- LATICRETE, a leading manufacturer of globally proven construction solutions for the building industry, is solidifying its place as a driving force behind industry advancements with an investment in 3D printing mortar technology. The company is sponsoring Ball State University Design Innovation Fellow and assistant teaching professor Christopher Battaglia to create DE|stress, a 3D-printed concrete shell of 110 unique panels that will be assembled on top of a pavilion created using a 3D printable mortar prototype LATICRETE has developed and plans to launch in 2020. The project will be featured among 18 other temporary installations at Exhibit Columbus, the annual exploration of architecture, art, design and community in Columbus, Indiana that kicks off on August 23.

“Our company’s collaboration with Christopher and the production of a 3D printable mortar prototype is part of an ongoing innovation effort in both 3D printing and the digital transformation of construction. LATICRETE has been a trendsetting leader in the industry for more than six decades and is now using its knowledge of cement chemistry to build the future of the construction industry,” said LATICRETE Director of Innovation and Strategic
Planning Matthew Carli. “We are happy to support future talent like Christopher and anticipate that our work with Ball State University for Exhibit Columbus is just the tip of the iceberg.”

Key attributes of the prototype cement-based mortar for use in 3D printing are related to durability and the ability to produce this product globally. The prototype was designed to support multiple layers to avoid collapse, and created using controlled materials that can be locally sourced for mass production worldwide.

“The idea behind developing a 3D printable mortar is to streamline the construction process, requiring less labor and producing no waste on the jobsite. The construction industry in the U.S. is facing a major labor shortage, so using a 3D printable mortar would not take away jobs, but instead, it would act as a supplement where there is a current deficit,” added Carli.

In addition to the collaboration with Ball State University, LATICRETE is working with large scale 3D printers in other countries such as Dubai to test its prototype. Locally sourced and produced materials from LATICRETE are currently being printed by 3DVinci Creations to have a reproducible system developed for the Gulf environment.

“The printed materials are designed to encompass excellent performance, ease of use and sustainability,” said Dr. Kho Verian, the scientist who leads the development of LATICRETE 3D printing materials. “Dubai being synonymous with avant-garde is the perfect home for such collaboration and is the ideal opportunity for us to explore the local dynamics from sourcing local materials to understanding how the materials will hold up postprint.”
About LATICRETE

LATICRETE is a leading manufacturer of globally proven construction solutions for the building industry. LATICRETE offers a broad range of products and systems covering tile & stone installation and care, masonry installation and care, resinous and decorative floor finishes, concrete construction chemicals, and concrete restoration and care including the SUPERCAP® System. For over 60 years, LATICRETE has been committed to research and development of innovative installation products, building a reputation for superior quality, performance and customer service. LATICRETE methods, materials, and technology have been field and laboratory proven by Architects, Engineers, Contractors and Owners. Offering an array of low VOC and sustainable products, LATICRETE® products contribute to LEED certification, exceed commercial/residential VOC building requirements, and are backed by the most comprehensive warranties in the industry. For more information, visit laticrete.com.