

Contacts: Chad Corley The QUIKRETE<sup>®</sup> Companies (404) 634-9100 ccorley@quikrete.com

## QUIKRETE<sup>®</sup> AND CONTOUR CRAFTING CRACK THE CODE ON 3D PRINTED CONSTRUCTION USING CONCRETE

ATLANTA and LOS ANGELES (April 27, 2020) – The <u>QUIKRETE® Companies</u> and the <u>Contour Crafting Corporation</u> (CC Corp) recently entered into a collaboration to develop proprietary concrete used in the automated construction of residential, commercial, industrial and government structures using Contour Crafting technology. Unlike other mortar-based 3D printable products, the advanced concrete mix produced by QUIKRETE® is formulated to include coarse aggregate specifically for use with CC Corp's proprietary 3D printing system. The first true 3D printing concrete makes building high-quality customized structures fast, efficient and affordable.

CC Corp has lead the charge to obtain regulatory acceptance for this innovative construction technique, successfully sheparding Acceptance Criteria AC509 (for 3D printed concrete walls) through the rigorous ICC-ES approval process. The new concrete under development by QUIKRETE addresses key requirements for printability and constructability, including shape-holding thixotropic properties as well as rapid setting and dimensional stability features. With the initial goal of providing low-income housing and homes for disaster relief, a 2,000 square-foot house can potentially be built in few days, not weeks, for a fraction of the cost of traditional construction. This is accomplished by dispensing the QUIKRETE concrete in layers using CC Corp's 3D printing technology according to digital architectural models.

"QUIKRETE appreciates the practical approach taken by Contour Crafting to address real-life issues that we can anticipate as we implement this game-changing, concrete-printing technology," said Chuck Cornman, Chief Technology Officer at The QUIKRETE Companies. "The material properties needed for 3D concrete printing are closely aligned with QUIKRETE's core technologies in rheological tuning, hydration and set time control, and managing dimensional stability."

"CC Corp is pleased with the collaboration arrangement with The QUIKRETE Companies as it aspires to create useful construction technologies that offer structurally and

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economically viable solutions that perform at least as well as the conventional concrete construction practices," said Dr. Behrokh Khoshnevis, CC Corp's Chief Executive Officer.

After comprehensive testing at an independent accredited lab at the University of Southern California to confirm AC509 compliance, the 3D printing process will be used to construct four low-income housing units as part of a demonstration project sponsored by the Los Angeles County Development Authority (LACDA). This innovative build will showcase the great potential of the Contour Crafting and QUIKRETE technology in achieving low-cost, sustainable construction to address the homelessness problem in Los Angeles and worldwide. For more information, visit <u>www.contourcrafting.com</u>.

## The QUIKRETE<sup>®</sup> Companies

Founded in 1940, The QUIKRETE<sup>®</sup> Companies serves the residential, commercial, industrial and infrastructure industries as a scalable, single-source solution for building, repair and rehabilitation projects across North America. Not only the largest manufacturer of packaged concrete and cement mixes in the U.S. and Canada, The QUIKRETE<sup>®</sup> Companies also delivers high-quality, commercial-grade products through related industry-leading organizations including Custom Building Products<sup>®</sup>, Contech<sup>®</sup> Engineered Solutions, Rinker Materials<sup>™</sup>, Keystone Hardscape<sup>®</sup>, Pavestone<sup>®</sup>, Best Block, Premier Building Solutions<sup>™</sup>, Spec Mix<sup>®</sup>, Target Technologies<sup>®</sup>, Daubois<sup>®</sup> and QPR<sup>®</sup>. The QUIKRETE<sup>®</sup> Companies operates about 250 facilities including technical centers to provide unmatched product innovation, depth, qualitycontrol and distribution as well as full-service customer support. The QUIKRETE<sup>®</sup> Companies truly is "What America's Made Of". For more information, visit <u>www.quikrete.com</u> or call (800) 282-5828.

## **Contour Crafting Corporation**

Contour Crafting Corporation (CC Corp) is an early stage company with the mission to commercialize disruptive construction technologies, starting with Contour Crafting (CC), CC Corp's flagship technology. CC Corp was recently founded by Dr. Behrokh Khoshnevis, the inventor of the Contour Crafting in collaboration with major international partners to commercialize Contour Crafting and his other large scale 3D printing technologies. There are more than 100 US and international patents on various aspects of Contour Crafting and other technologies which have been licensed to CC Corp by the University of Southern California and a significant number of additional patent applications are independently in progress at CC Corp. Contour Crafting was selected by the NASA Tech Briefs Media Group as the top technology among 1000+ globally competing technologies to receive Grant Prize in November 2014 and was earlier named as one of "25 Best Inventions of the Year" by National Inventor's Hall of Fame and History Channel's Modern Marvels Program. CC Corp's other large-scale 3D printing technology called Selective Separation Shaping (SSS) received another NASA international competition Grand Prize in 2016.

