

Giant Robots 3D-Printed Second Walmart Extension in Seven Days

3D Construction Delivers on Its Long-Awaited Promise of Time and Labor Savings

HUNTSVILLE, AL, UNITED STATES, April 15, 2025 /EINPresswire.com/ -- For the first time in history, 3D construction has fulfilled its promise of saving substantial time and labor for commercial projects. On February 19, 2025, Alquist 3D, using RIC Robotics' 3D printing robots, completed its second 3D-printed Walmart extension in Huntsville, Alabama, a 5,000-squarefoot, 16.5-foot-tall delivery warehouse in just seven days, including setup time. The project was finished two weeks ahead of schedule despite harsh winter conditions, demonstrating that with an experienced team, robotic 3D printing is truly transforming the commercial construction landscape.

The success follows the first Walmart extension in Tennessee, which took 45 print days to complete. Leveraging insights from Tennessee, the Alquist 3D team optimized machine performance, minimized downtime, and boosted efficiency—cutting the project timeline from 45 print days to just seven calendar days.

"We were able to minimize downtime to near-zero, thanks to the valuable



RIC Robots 3D printing



RIC Robot Printing

insights gained from Tennessee and our team's ability to adapt quickly," said Ryan Cox, COO of Alquist 3D.

How RIC's Proprietary Robots Deliver Unprecedented Efficiency:

1. Labor Efficiency & Cost Savings – The project was completed with five workers and two RIC-M1 Pro robots, compared to the 20-30-person crew needed for a build of this scale with traditional CMU construction method, significantly reducing labor costs and addressing the industry's skilled labor shortage.



Finished Walmart extension

2. Agile Modular Design - While traditional 3D printing's gantry systems require 2-3 days for setup, RIC's mobile construction robot, requiring little assembly and ready to work in 2-4 hours, would have already completed 40% of printing within that time.

3. Flexibility & Scalability – RIC's Mobile-Rail design and custom-made tool head by Alquist 3D enabled continuous printing of 60+ foot-long wall segments and reach for the tallest 3D-printed commercial structure at 20 feet. That has now been surpassed by RIC's latest model, RIC-PRIMUS, which can now print up to 32 feet high.

4. Material Flexibility - while other 3D printing providers restrict material supply, RIC leverages over a decade of global experience across four continents to enable compatibility with a wide range of material suppliers—including Quikrete and Sika, allowing contractors to choose the most suitable mix based on project needs and environmental conditions.

5. High-Speed Precision – Operating at 200mm/s, RIC's robots maintained stability and accuracy at significant heights, exceeding previous industry benchmarks.

6. Seamless Layer Consistency – Advanced robotic controls ensured smooth transitions around corners, solving one of the biggest challenges in 3D concrete printing.

"For the first time, we're not talking about the 'potential' of 3D printing—we have delivered real savings in time and labor," said Ziyou Xu, founder of RIC Robotics. "This project proves robotic 3D construction is a commercially viable solution for large-scale developments. And this is just the beginning."

The Huntsville extension is the second of many 3D-printed projects with Alquist3D using RIC's

robots as part of Walmart's nationwide expansion. This milestone marks the dawn of large-scale robotic 3D construction, transforming what was once an experimental technology into a commercial game-changer.

For more information about RIC Robotics and its robotic 3D printing solutions, visit <u>www.ricrobotics.com</u>.

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About RIC Robotics

RIC Robotics is a global pioneer in large-scale construction robotics, specializing in 3D printing technologies that are redefining the construction and design industries. By leveraging advanced proprietary systems, RIC delivers mobile robotic solutions that significantly reduce cost, time, and labor—while enhancing productivity and precision. Its comprehensive offerings include robotic 3D printing, architectural design, customized material solutions, and expert training and support. Learn more at <u>www.ricrobotics.com</u>.

About Alquist 3D

Alquist 3D is a leading construction technology company specializing in 3D-printed homes and infrastructure. Committed to affordable, sustainable, and disaster-resilient housing, Alquist 3D leverages cutting-edge robotic 3D printing to reduce construction costs, minimize waste, and accelerate building timelines. By integrating advanced materials and automation, Alquist 3D is redefining the future of construction. For more information, visit <u>www.alquist3d.com</u>.

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