

## Form Found Design (FFD) combined Helix Steel TSMR and CTS Rapid Set to realize the MARS Pavilion



NEWS PROVIDED BY  
**Helix Steel** →  
26 May, 2017, 09:12 ET

LOS ANGELES, May 26, 2017 /PRNewswire/ -- Is it possible to design a new concrete casting methodology, leveraging the precision and freedom of industrial robots? That was the question posed by Form Found Design when Joseph Sarafian and Ron Culver began their Fabric Forms research. They quickly determined that a fabric sleeve, when positioned by robots, could act as an adjustable formwork to realize innumerable geometric possibilities. By sending digital 3D designs to these robots, an innovative digital concrete fabrication method was created.

When Amazon asked them to build the thirteen-foot-tall pavilion at the company's MARS conference, Joseph and Ron knew they needed a solution for reinforcing. Since all 70 components are unique, conventional rebar would have proven too labor intensive. After searching the market for applicable reinforcement solutions, Helix Steel Twisted Steel Micro Rebar was a perfect fit for this application. "Its capacity to provide homogeneous reinforcement throughout the concrete eliminated the time and labor associated with building 70 unique rebar lattices," said Joseph Sarafian, CEO and Co-Founder of FFD.



Form Found Design (FFD) combined Helix Steel Twisted Steel Micro Rebar and CTS Rapid Set Cement All to realize the MARS Pavilion. Yet another American Innovation with Global Significance.

Needing a cementitious mix design that provided a low carbon footprint and high structural strength, FFD selected Rapid Set Cement All from CTS. The combination of Helix Steel and CTS enabled FFD to meet their unique needs.

"CTS is well-known for the innovative technology we bring to design and construction. We were honored to be a part of this groundbreaking project that is taking innovation to the next level," said Ken Vallens, President at CTS.

The MARS Pavilion will be on display at the A+D Museum in LA, starting in July 2017. Come have a look and see for yourself where the future of construction is heading.

About Form Found Design ([www.formfounddesign.com](http://www.formfounddesign.com))

Form Found Design is a collaborative design studio based in Los Angeles with a belief that design must be derived from the geometry found in nature using the most advanced digital tools available. This fusion of nature and robotics is a motif explored in all of their projects, most recently the MARS Pavilion for Amazon's MARS Conference in Palm Springs.

About Helix Steel ([www.helixsteel.com](http://www.helixsteel.com))

Helix Steel, a Pensmore company, is the manufacturer of Twisted Steel Micro Rebar ("TSMR"), the leading proactive concrete reinforcement technology in the world. Helix Steel is leveraged across a variety of markets including commercial, industrial, precast, residential, underground and infrastructure and in applications ranging from structural, temperature and shrinkage to crack, seismic, impact and blast resistance.

About CTS ([www.ctscement.com](http://www.ctscement.com))

CTS Cement Manufacturing Corporation manufactures Rapid Set® professional-grade cement products for concrete repairs, restoration, and new construction projects. Construction professionals choose Rapid Set when superior durability is required, results need to be structurally sound and aesthetically pleasing, and to save time and money.

SOURCE Helix Steel

Related Links

<http://www.helixsteel.com>