



Q2 Stadium Austin, Texas

 CASE STUDY

Customer

When Major League Soccer expansion team Austin FC was founded in 2019, they needed a place to call home.

The goal wasn't to create a new mega stadium. Instead, Q2 Stadium is a casual, intimate environment with lots of personality and local Central Texan flair.

The \$260 million, 20,500-seat, ground-up soccer stadium sits on a 24-acre site surrounded by an amphitheater and stage plus other outdoor spaces.

Tech-forward planning brings fans close to the action through high-resolution LED video displays and double-sided marquee displays that make live video, instant replays, stats and game information, animation and sponsorship messages visible from any seat.

Several steps were taken to lessen the impact of the year-round sun and heat in the open-air stadium: open corners allow breezes to travel through, 30% of seats are made of mesh material, the roof shields every seat from the sun, etc. Due to limited onsite parking, the site doesn't have to worry about a heat island effect further increasing temperatures. Fans who want to watch Austin FC can walk, ride a bike or take public transportation to get to Q2 Stadium.

This open-air venue needed high-performance cable and connectivity to withstand Austin, TX, weather while also supporting wireless connectivity, immersive technology, digital tickets and mobile ordering



Challenge

The weather in Texas can be unforgiving—especially for the cables that will be exposed to outdoor conditions. Not only can the sun send temperatures to uncomfortable levels, but the infrastructure in the open-air stadium would also need to withstand cold temperatures, too (especially considering the unexpected winter storm that hit the area in February 2021).

“It was a challenging site because so much of it is outdoors,” says Lee Snedaker, owner of manufacturer’s representative group Digitech Sales. “There were inherent challenges with cable routing, pathways and conduit. It’s not just an indoor environment where you can run standard plenum-rated cable and expect it to last for 25 or 30 years or longer.”

Reliability was also crucial for the stadium’s cabling and connectivity. The network infrastructure would need to support not only wireless connectivity and immersive fan technology, but also digital ticketing and mobile ordering and payments for food and beverages: Q2 Stadium doesn’t accept cash or physical game tickets.

As the June 2021 completion date grew closer, the project also encountered a challenge that no one predicted or planned for: COVID-19, which put aggressive timelines at risk. Much of the installer training was conducted outside so workers could spread out to maintain social distancing.



Discovery

Belden had built long-established relationships with the integrators and contractors involved in the project. Our dedicated stadiums and venues team also took time to get to know and understand the owner (City of Austin) and operator (Two Oak Ventures) to discover what they wanted this project to be.

A 25-Year Product Warranty and Lifetime Application Assurance, focus on easy installation and known product performance put Belden solutions at the top of the list.

“The customers were really sold on Belden being an end-to-end solution and a world-class brand with great recognition in the broadcast space,” says Snedaker.



Solution

Belden provided Q2 Stadium with a complete, end-to-end cabling and connectivity solution. In addition to high performance, many of the solutions were chosen because of the ease of installation and time savings they provided.

FiberExpress (FX) fiber optic cable, patch cords and Fusion Splice-On Connectors were used for the fiber infrastructure. Because the connectors are pre-polished and pre-cleaved, there are no adhesives, crimping or polishing required for termination, minimizing installation errors.

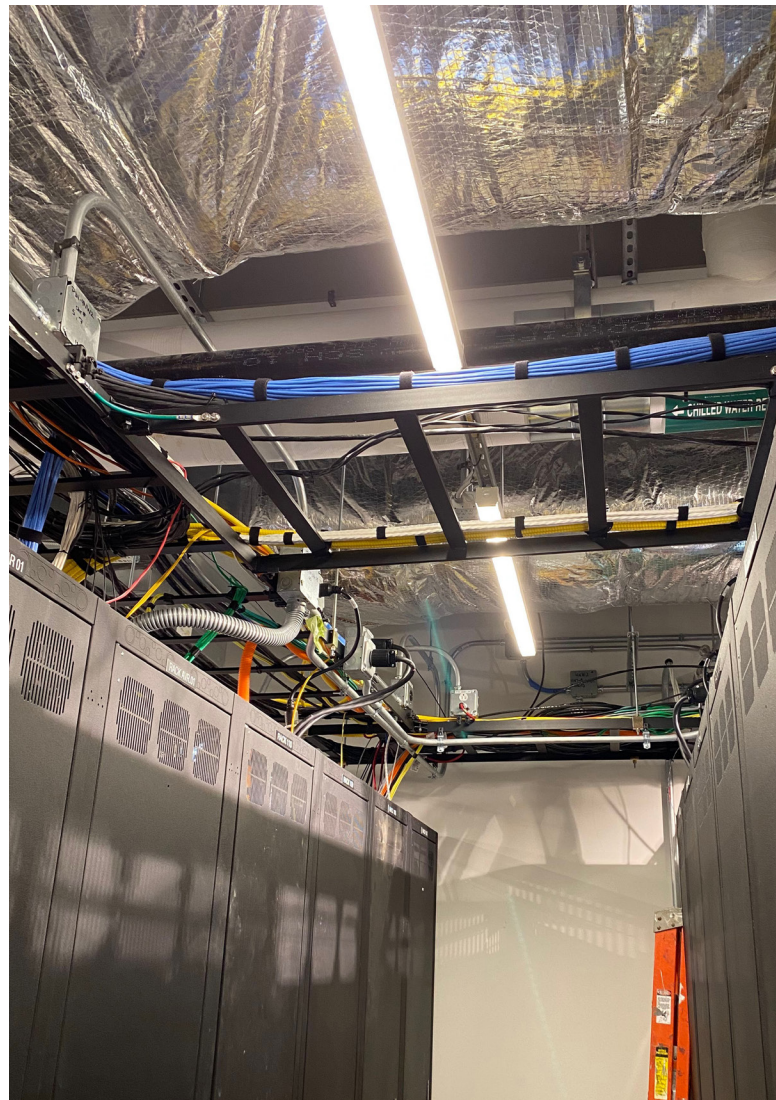
After trying a few splicers, the installers also chose to use Belden's FX Fusion Splicer. It supports consistent, reliable and high-quality terminations for single fiber splice-on connectors and pigtail splicing. Active cladding alignment ensures that the splicer achieves perfect alignment by automatically adjusting fiber ends in multiple directions while eliminating errors due to dust and other contaminants.

The REVConnect® 10GXW System was deployed as well, including cabling, patch cords and connectivity. Its fast, easy and reliable termination process saves valuable time while also reducing rework. In 15 minutes or less, installers—even those new to the field—can be ready to go. Instead of learning many different termination processes for jacks and plugs, installers are trained on one methodology that covers any termination style. This made training quick, ensuring that workers could spend as much time as possible on jobsites.

“The FX Fusion Splice-On Connectors and REVConnect Connectors definitely saved time on installation and testing,” says Snedaker. “REVConnect eliminates some of the traditional hardware needed and makes it less time consuming. Both are more efficient to save the contractor money and time.”

Along with Belden's broadcast and AV cabling, copper and fiber cables rated for outdoor applications were also used to ensure lasting performance in the open-air stadium, ensuring performance despite sun, wind, rain and snow.

Many of these same solutions were also used in the design and construction of St. David's Performance Center, Austin FC's training facility in Northeast Austin.





Results

Q2 Stadium welcomed fans for the first time on June 16, 2021, to host an international women's exhibition match between the United States and Nigeria. Just a few days later, Austin FC played its first-ever game at Q2 Stadium against the San Jose Earthquakes.

Because the stadium opened its doors without cellular carriers providing service on the distributed antenna system (DAS), fans relied exclusively on the Wi-Fi 6 system for connectivity, testing the robustness and quality of Belden's cabling infrastructure right away.

As Austin's first sports venue for a major league team, Q2 Stadium is a unique reflection of the city's love for soccer and the outdoors wrapped up in an inviting, relaxed atmosphere.

"Belden was terrific to work with," said Austin FC's Vice President of Information Technology Ryan Fannin. "They were smart, capable and ultimately provided a high-quality product that will be the backbone of Q2 Stadium for many years to come."

About Belden

Belden Inc., a global leader in high quality, end-to-end signal transmission solutions, delivers a comprehensive product portfolio designed to meet the mission-critical network infrastructure needs of industrial, enterprise and broadcast markets. With innovative solutions targeted at reliable and secure transmission of rapidly growing amounts of data, audio and video needed for today's applications, Belden is at the center of the global transformation to a connected world. Founded in 1902, the company is headquartered in St. Louis, USA, and has manufacturing capabilities in North and South America, Europe and Asia.

For more information, visit us at [belden.com](https://www.belden.com).



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