

BELDEN

SENDING ALL THE RIGHT SIGNALS

Little Caesars Arena

With Belden cabling and connectivity, Little Caesars Arena achieved its goal: to become one of the most technologically advanced stadiums ever built.



Little Caesars
arena



Our End-to-End Expertise
Your End-to-End Solution



Customer

Little Caesars Arena is a major milestone in the long-cherished vision of the late Mike Ilitch and his wife and business partner, Marian Ilitch, for a bustling downtown Detroit. All launched by a single Little Caesars Pizza store, the Ilitch companies now operate under the leadership of Christopher Ilitch.

Opened to the public in September 2017, Little Caesars Arena is home to the Detroit Red Wings, Detroit Pistons and countless other entertainment and community events. The venue is an anchor of The District Detroit, a dynamic urban sports and entertainment destination contributing to Detroit's incredible comeback with new shopping, restaurants, offices and residential development.

Owned by the Downtown Development Authority (DDA) and operated by Olympia Entertainment, the Little Caesars Arena complex, including the unique Via concourse and adjacent office and retail development, reflects an investment of \$863 million, including nearly \$540 million in private financing from the Ilitch organization. The arena is architecturally designed by HOK, so that its concourses and associated fan amenities are an active participant in the day-to-day experience, with storefronts facing not only the interior concourse, but also the exterior district fabric. The deconstructed design brings traditional concourse amenities outdoors into the Via, an ETFE-covered concourse that acts as a retail galleria with offices, four full-service restaurants, retail and amenities.

Designed to be one of the most technologically advanced venues ever built, Little Caesars Arena features a 5,100-square-foot, center-hung video board and more than 45 LED displays, totaling more than 13,500 square feet of space and 16.5 million

individual lights. The Chevrolet Plaza is an inviting outdoor space complete with a 900-square-foot video board and technology that enables the space to host pre-game, interactive fan activities for up to 3,000 people.

The center-hung video board is the largest seamless scoreboard in the world. It creates a 360-degree fan experience with wrapping video programming. Beneath it hangs four undermount displays for fans who are sitting up close. The suites are designed with an open floor plan and are manually operated by an iPad that has the ability to control lighting, drapes, temperature, the televisions and in-suite food and beverage ordering. Interactive story walls throughout the venue pay homage to the Detroit Red Wings' 11 Stanley Cup teams, the Detroit Pistons' three NBA championship teams and Detroit's incredible musical heritage.

High-speed connections and high bandwidth levels – along with more than 1,000 wireless access points – allow fans to stream content, post photos and share their experiences on social media wherever and whenever they want. Wireless coverage extends to the retail, entertainment office and residential units outside the perimeter of Little Caesars Arena.





Challenge

Containing more commercial AV than nearly any other professional venue, Little Caesars Arena is packed with automation and technology. It needed a cabling and connectivity partner that could not only keep up with the state-of-the-art systems being utilized in every corner of the facility, but also provide products quickly to ensure that the arena could open in September 2017 as planned.

To support this technology, a cable that provides 40G data throughput was needed. The arena's network is made up of more than 12,000 active ports and 45 intermediate distribution frames (IDFs) that connect cables between devices and a main distribution frame (MDF). Little Caesars Arena also needed a partner that was flexible and comfortable with transformation, knowing that projects of this size and scope are ever-changing.



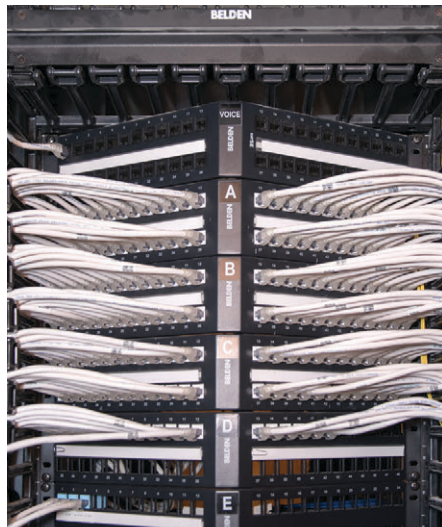


Discovery

Grass Valley, a Belden Brand, had a solid relationship with Olympia Entertainment. Knowing that Belden met all of the project requirements, Grass Valley introduced Belden to Olympia Entertainment.

Following that introduction, the project's sports technology consultant, Van Wagner Group, and system design and integration firm Cerami & Associates, met with Belden to learn more. The breadth of cabling and connectivity available was exactly what the arena project needed.

Belden provided the infrastructure required to generate, transmit and protect signals within and around Little Caesars Arena.





Solution

Belden provided the infrastructure required to generate, transmit and protect signals within and around Little Caesars Arena. Working side by side, Grass Valley and Belden established the enterprise infrastructure and AV equipment needed.

Initially, the arena was designed specifically to serve a professional hockey team; in November 2016, however, the decision was made to bring professional basketball into the mix as well. Belden and the rest of the Little Caesars Arena project team were able to take a design that was largely built around NHL specifications and transform it to include significant NBA requirements. To execute this change, Belden provided large amounts of fiber and connectivity quickly to make sure the original timeline could still be followed.

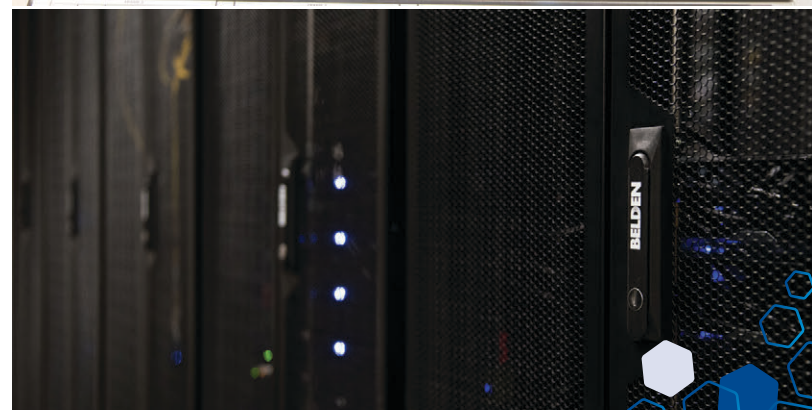
Low-loss OM4 fiber cabling was installed in conjunction with Belden FiberExpress Fusion Splice-On Connectors, which combine the benefits of fusion splicing with the simplicity of field-installable connectors to reduce installation errors.

Belden 10GXS Small-Diameter Category 6A cable was also used, providing a simple, compact design to make the most of available space without compromising performance. Its small bend radius allowed the cable to be installed in tight spaces throughout the arena; easy-to-separate pairs and easy-to-remove barrier tape allowed for fast termination and installation.

For convenience, all enterprise data center cabinetry and cable management systems arrived onsite fully tested and assembled according to specific requirements from Motor City, the onsite electrical and low-voltage systems integrator. Once they arrived, they were immediately ready for deployment

with no additional configuration required. The cabinets were built as needed, labeled according to preferences, loaded into the delivery truck in reverse order and unloaded in the proper order: row by row in the data center for the fastest installation possible.

Grass Valley LDX 86 WorldCam cameras were provided for broadcasting purposes, with traditional HD/3G acquisition, as well as the ability to upgrade directly to 4K UHD and/or XtremeSpeed (3x in 1080p or 6x in 1080i) functionality. The LDX86 WorldCam camera is the first to deliver instant time-to-air with no internal camera storage requirement. Grass Valley's Karrera production switcher will help Little Caesars Arena create compelling and engaging content with multi-format support – including 1080p and 4K. It's also easily upgradeable as the venue's needs change.



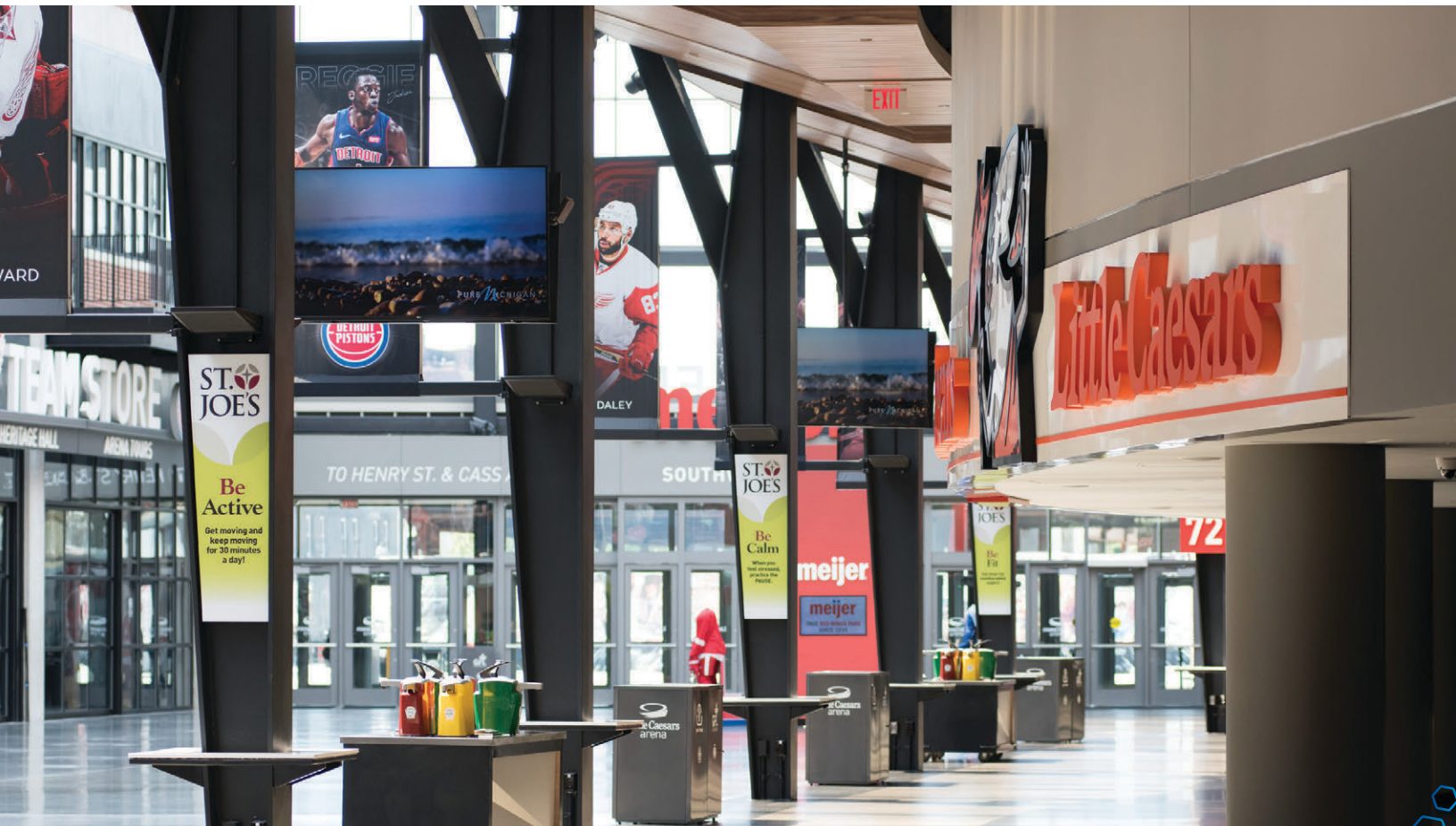


Results

The arena has the cabling and connectivity infrastructure in place to support today's high-tech advances, as well as whatever technology developments emerge down the road.

With strong support from Belden, Grass Valley and the rest of the project team, Little Caesars Arena achieved its goal of unveiling one of the most technologically advanced arenas ever built. The venue opened on Sept. 12, 2017, as planned.

The arena has the cabling and connectivity infrastructure in place to support today's high-tech advances, as well as whatever technology developments emerge down the road, so it can continue to set an example for other arenas. The venue's forward-thinking, state-of-the-art reputation will also help attract other organizations to develop and invest in The District Detroit.



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