



# BELDEN

## Circa Resort & Casino Las Vegas

 CASE STUDY

### Customer

When Derek and Greg Stevens (known as the “D Brothers” from Detroit) envisioned their new Las Vegas venue, they wanted to construct an experience different than any other casino or resort.

Everything about the new 35-floor, 1.2 million-square-foot property is distinct—from its adults-only atmosphere to its old-school Vegas ambiance, complete with the iconic Vegas Vickie neon sign.

Circa Resort & Casino Las Vegas also features a fifth-floor aqua theater called Stadium Swim: six pools, swim-up bars, cabanas, daybeds and chaise lounges spread across three cascading levels offer 4,000+ people a perfect view of a 40-foot by 143-foot high-definition screen that broadcasts all kinds of entertainment.

Covering an entire city block—and the tallest hotel north of the Strip—this is the first hotel-casino since 1980 to be built from the ground up in downtown Las Vegas.

Customer  
**Challenge**  
**Discovery**  
**Solution**  
**Results**

**Belden cabling and connectivity support the use of Digital Electricity™ as the backbone power distribution infrastructure to engineer the Strip’s most intelligent building**





## Customer

### Challenge

### Discovery

## Solution

### Results

## Challenge

The owners of the Circa Resort & Casino Las Vegas applied their ingenuity to every aspect of the property.

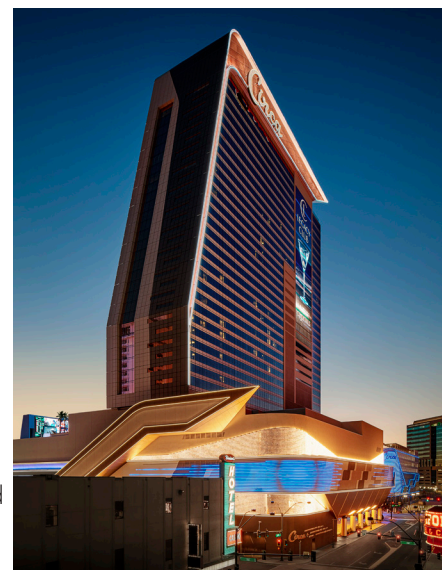
Instead of using dedicated AC power, for example, Greg Stephens wanted to use Digital Electricity™ (DE) as the backbone power distribution infrastructure to decrease energy use and create an intelligent building. His vision involved powering everything from lights and switches to in-room climate control and wireless access points with DE.

This approach would require a cabling and connectivity partner that could think outside the box. Because unobstructed views were crucial to many components of the project, including Stadium Swim, all infrastructure had to be hidden: no utility poles for Wi-Fi connectivity.



With the structure being built along a narrow street among existing high-rises, careful planning and maneuvering for material delivery would be needed throughout the project.

COVID-19 also created its own restrictions, limiting the number of people allowed on the jobsite and preventing regular check-ins on progress. The project had to be managed remotely while still staying on schedule.



## Discovery

FEA Consulting Engineers, a hotel engineering firm based in Nevada, was partnering with VoltServer—the creator of Digital Electricity—to make the owners' dream a reality. The engineering firm recommended that Belden provide cabling and connectivity solutions.

"We were thrilled," says Ken Hydzik, director of sales for VoltServer. "We've had great success working with the Belden solution. They have quality products and cable options optimized for use with Digital Electricity. Belden was the first cable manufacturer to recognize the benefits of Digital Electricity, and we appreciate their innovation and partnership being first to market."



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## Solution

Belden Digital Electricity Cables were deployed to support the backbone power distribution infrastructure; they're optimized to safely extend Digital Electricity across the longest distance possible. In many cases—including at Circa Resort & Casino Las Vegas—networks utilizing Digital Electricity can be installed by low-voltage technicians instead of electricians (similar to a PoE cable), saving time and money.



In addition to Digital Electricity Cables, Belden also provided Category 6, AV, CCTV/security and access control cable, as well as copper connectivity, racks and cabinets.

Keith Nichols, founder of DKNQ Inc. and owners' representative, attributes the project's ability to wrap up two months ahead of schedule in part to Belden's REVConnect® system.

"We saved so much time because we were able to pull the wire in and not have to punch it down on the blocks," he explains.

When first terminated, the connection can be tested to ensure performance. Then the cable can be pushed back into the wall or ceiling so finishing contractors can come through. After their work is done, the jack or plug body and faceplate can be installed. REVConnect's unique core and cap lets installers finish 95% of the termination without needing to know whether a jack, plug or coupler will be used.

"We left all the connections terminated in the ceiling and drywalled it," says Nichols. "Because it was

terminated and tested before we put the drywall up, it saved tons of time. We didn't have to put anyone on a lift to test and terminate everything in the air. The labor savings were very large."

He says REVConnect was also a lifesaver amid COVID-19, allowing installers to complete work to a certain point and vacate the site so painters and other contractors could finish their work. The trades never had to cross paths or work side by side.

The connectivity system also allowed apprentices and new installers to complete mission-critical work after only 15 minutes of training—without any problems and without anyone having to check their work.

"REVConnect doesn't allow for error," Nichols explains. "With a traditional termination, a new employee doesn't know which way to terminate, or they can mess up the wires. If you don't have someone who's good at crimping, terminating and punching down, you have a mess on your hands. REVConnect allowed us to quickly become operational. Conventional termination methods don't do that."

Communication Electronic Systems (CES), a Belden Certified Belden Installer located Las Vegas, did all the installation work. Because the company is certified, its team members are trained according to the latest, most relevant industry technology and standards. CES is also able to offer customers 25-Year Product Warranties and Lifetime Application Assurance for Belden solutions.





## Results

The Circa Resort & Casino Las Vegas opened nearly two months ahead of schedule—in October 2020—in the middle of a pandemic. Nichols says this was only possible with a partner like Belden.

Hydzik agrees: “Working with FEA and Belden early on in the design process was critical to the success of building in the middle of a pandemic. Having an owner, consultant and manufacturer that were ready to change the power distribution paradigm in this market vertical has been a gamechanger. We’re already seeing substantial interest on the Strip considering this same Digital Electricity model.”

In addition to lower utility bills, Nichols estimates construction cost savings of between \$2 million and \$3 million thanks to the combination of using VoltServer’s Digital Electricity and Belden’s Digital Electricity Cables instead of dedicated AC power.

Circa Resort & Casino Las Vegas now stands out on the Strip for many reasons: Not only does it bring new attractions to Fremont Street, but it’s also the most intelligent building downtown, taking advantage of cutting-edge technology like advanced building automation, digital in-room controls, LED lighting and electrical power distribution—all using Digital Electricity and supported by Belden cables and connectivity.

