



Photo by Mel Miskimen

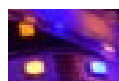
**PROJECT OVERVIEW**

Project Name: **Kegnado Lighting at Lakefront Brewery**  
 Location: **Milwaukee, Wisconsin**  
 Project Completion: **September 2019**

**STAKEHOLDERS**

Client: **Lakefront Brewery**  
 Collaborator: **Retailworks Inc.**  
 Lighting Package & Lighting Installation: **ACME Corp. Production Resources** Core team includes:  
 - Greg Geddes, Project Manager  
 - Marshall Thornton, Programmer  
 - Tom Acker, Fabricator  
 Structural Engineer: **GRAEF**  
 Structural Builder: **Sprinkman Corporation**  
 Custom Fabrication: **Benz Metal Products Inc.**  
 Building Reinforcement: **KMI Construction**  
 Keg Installation: **J.H. Findorff and Son, Inc.**  
 Electrical Contractor: **Brew City Electric, LLC**  
 Painting: **Common Links**  
 Cabling: **Munger Technical Services**

**CITY THEATRICAL SOLUTIONS**



**Custom cut QolorFLEX® RGB LED Tape** (P/N 5050-12-RGB-60-5-67-1); 86 pieces cut to 1.8m and 56 pieces cut to 1.3m, all with custom 60" leads



**12 QolorFLEX 24x3A Dimmers** (P/N 5810) provided 288 channels of control



Milwaukee's [Lakefront Brewery Inc.](#), now considered a Milwaukee landmark, opened its doors in 1987 as a craft brewery located on the

Milwaukee River. Its rich history includes partnerships with local taverns, preservation of local historical pieces, and tours. Created using only subcontractors based in the Southeastern Wisconsin area, the Kegnado art installation on the brewery's facade now illuminates the Milwaukee RiverWalk every night from dusk until 10PM.

**PROJECT CHALLENGES**

Designed as an outdoor art installation, the lighting team from [ACME Corp. Production Resources](#) was looking for a way to illuminate 71 metal barrels that would be mounted to the side of Lakefront Brewery's waterfront facade. They sought an LED tape that could create a substantial enough backlit glow onto the stainless steel barrels from two parallel rings such that it would be seen from all vantage points around the river. The ideal tape would be durable enough to withstand the outdoor elements and last for daily use for years to come without requiring cumbersome replacement and re-installation.

Lighting the color-changing LED tape for the Kegnado design would require a lot of data. The team looked for a dimming control solution that would be efficient and work without affecting the brewery's POS systems, and also small enough to be hidden on the building's facade.



Photos by Harrison Hohnholt



## SOLUTION

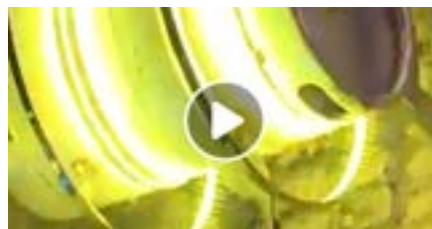
Having had positive experiences when it came to its long-lasting durability, ease of installation and use, and outdoor rating, the lighting team from ACME Corp. Production Resources chose a QolorFLEX system, complete with QolorFLEX RGB LED Tape and QolorFLEX 24x3A Dimmers, for the Kegnado at Lakefront Brewery project.

Planning and preconstruction stages for the project lasted over a year, which allowed them to test the QolorFLEX LED Tape and Dimmers for reliability before installation. During this time the team also finalized CAD drawings in which QolorFLEX LED Tape could be mounted four inches away from the barrels to achieve a light coverage of approximately 11" around the barrels. The team opted to have the QolorFLEX LED Tape custom cut and installed to the harnesses by City Theatrical, as a cost effective option.

Twelve QolorFLEX 24x3A Dimmers were used to provide dimming control for 142 pieces of QolorFLEX LED Tape. The dimmers were separated into two custom NEMA enclosures, six per box, and the output from each box went to a terminal strip. Each was labeled appropriately, making the dimmer set up quick and easy for the programmer to reconfigure and patch on the console.

**“With QolorFLEX LED Tape installed on the back side of two custom harnesses 4” from each barrel, the light appears to glow all the way around the barrels throughout the Kegnado installation.”**

*- Mark Miskimen, President, ACME Corp. Production Resources*



Watch Fox6 News [Kegnado unveiling video](#) to see QolorFLEX effects in action.



## TESTING

The first rig the ACME Corp. Production Resources team made was out of MDF rings. They held the QolorFLEX LED Tape in place temporarily and found that it lit the barrel well. They then ordered custom LED Tape harnesses for this outdoor usage and had the first stainless steel prototypes made. On the metal, the team found they weren't getting as much light coverage as desired. They then created CAD drawings with variable beam spreads, to determine an ideal distance between the LED tape and the barrels and channel depth for mounting. From there, they found that two rings per barrel would create the ideal illumination for the installation.

**“We chose QolorFLEX because we knew it would give us the look and flexibility we were going for, and also because we’ve used it for other installations without having to replace it for years.”**

*- Mark Miskimen, President, ACME Corp. Production Resources*

The team used two control boxes, a CueServer 2 and CueServer 2 Mini, and found the amount of data that would be streaming for the Kegnado would interfere with the brewery's POS systems. All conduits were full, and it would be expensive to run DMX cable from downstairs. They decided to install the servers close to the Kegnado boxes, and installed the QolorFLEX Dimmers inside the boxes, indoors, next to one of the craft beer aging tanks. They created custom control wiring to line up with the dimmers, and spent time troubleshooting to be able to send power to the entire installation. Marshall Thornton from ACME Corp. Production Resources programmed the dimming cues for the Kegnado with various programs for nightly usage, and special cues for holidays and product launches.