

CITY OF CHATTANOOGA

LED ADVANCEMENTS

Case Study



KEEPING CHATTANOOGA BRIGHT AND BEAUTIFUL

SUMMARY

In 2017, due to challenges associated with an existing supplier of outdoor decorative luminaires, the streetlights in the City of Chattanooga were at risk of going dark within two to three months. The Electric Power Board (EPB) of Chattanooga and the City of Chattanooga partnered with King Luminaire Co. Inc, a division of StressCrete Group to replace their failing decorative streetlights with new light-emitting diode (LED) luminaires. King Luminaire supplied the City of Chattanooga with approximately 1,800 premium quality decorative LED luminaires by the expected delivery dates to ensure that the city maintained adequate lighting. The new luminaires significantly reduced the city's future maintenance costs providing the city with an American Made, quality lighting solution that was built to last. King Luminaire is extremely proud to be able to contribute to Chattanooga's mission of being one of the most progressive and livable mid-sized cities in the US!

PROJECT HIGHLIGHTS

Project Site:

Chattanooga, Tennessee

Number of Fixtures:

1,800

Fixtures Provided:

K124 Paragon and K118
Washington post top acorns

Increased Reliability:

High performing, quality luminaires which include a 7-year warranty on all electrical components, and have low maintenance costs



THE CHALLENGE

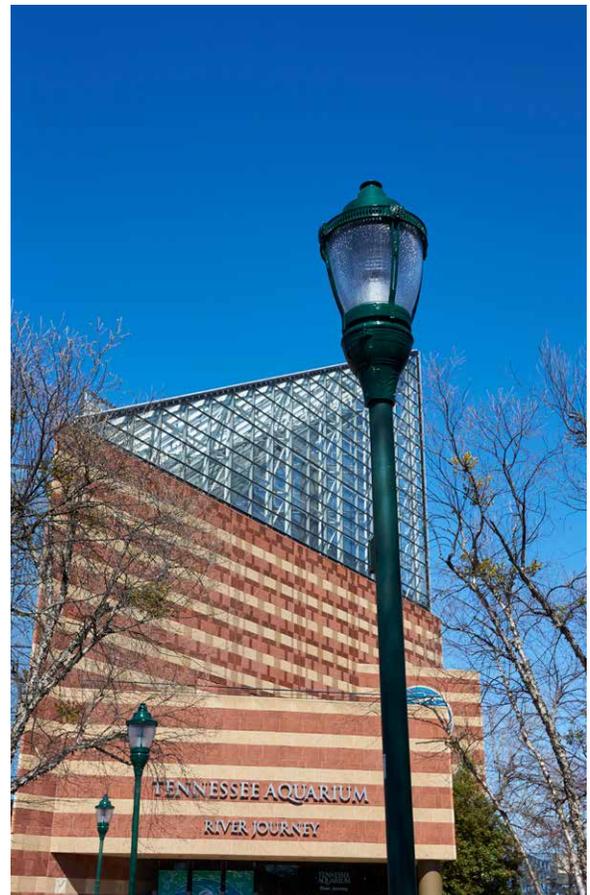
In 2017, the streetlights in the City of Chattanooga began to fail at a rapid rate as its control system and replacement drivers were unable to be imported, creating the risk that the city may go dark within two to three months. Simply put, too many of their streetlights did not work as promised¹ and residents were becoming fearful of the dangers of darkness including not being able to see wildlife such as coyotes². This was a scenario that was unacceptable for a city that is known as one of the most progressive and livable mid-size cities in the United States³. Working with the EPB, the City of Chattanooga had to find a reliable solution to their streetlight problem that maintained the city's vision of being a progressive, 21st century city. To further add to this challenge, they needed to find and implement a solution in record time!

THE SOLUTION

With only three months to consult, engineer and manufacture, King Luminaire was able to provide the City of Chattanooga with over 1,500 decorative LED luminaires before the important 'lights out' deadline. The K124 Paragon and K118 Washington post top acorns were manufactured in custom colors as requested by the city to match the existing streetscape.

Specifications, features and benefits:

- Replacement and installation of approximately 1,800 fixtures over 6 months, with ongoing construction projects underway
- Made in America luminaires allowed for quick turnaround times offering exceptional light quality, long usable life, energy efficiency and durability; all of which help cut down energy consumption
- The decorative LED fixtures were designed to be compatible with the EPB's fiber optic based smart meter network to further increase energy efficiencies
- Customization of product labels assisted with the city's asset management practices
- The LED luminaires only need replacement after approximately 15-20 years and are backed with a 7-year warranty, greatly reducing future maintenance costs and eliminating potential replacement costs



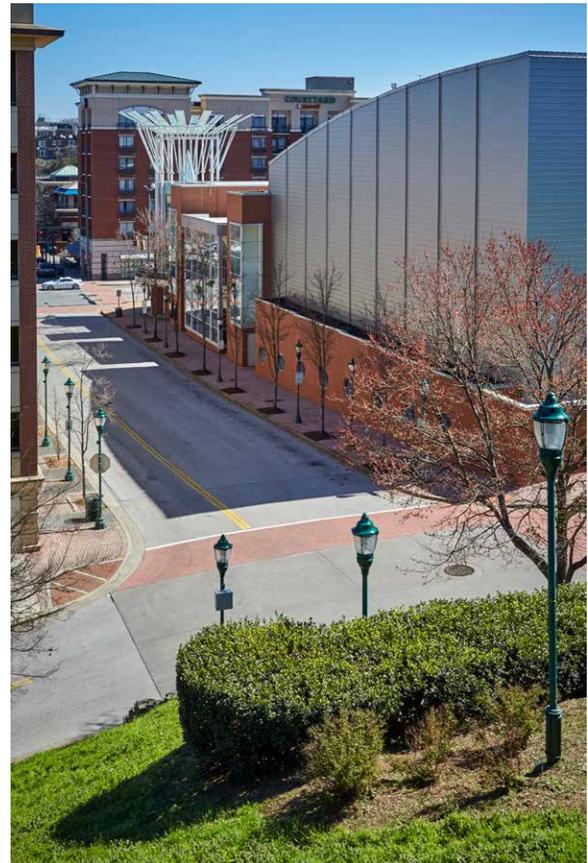


THE RESULTS

King Luminaire with its manufacturing facility in Jefferson, Ohio, was able to provide all LED luminaires that the City of Chattanooga and the EPB required within the short time frame required. The installation of new luminaires helped Chattanooga eliminate the threat of streetscapes going dark and replaced their failing LED streetlights with reliable and aesthetically pleasing LED luminaires according to existing architectural standards. In addition, King Luminaire was able to reduce asset management risks and maintenance costs for the city and the EPB by backing their products with a 7-year warranty.



With their new Made in America LED streetlights, the City of Chattanooga maintains their position as one of the most progressive and livable mid-size cities in the United States and their citizens will no longer worry about failing lights that create potential safety hazards. Iconic landmarks such as the Tennessee Aquarium and AT&T Field are lit up with the new LED streetlights, keeping Chattanooga bright and beautiful!



References

1. <https://www.timesfreepress.com/news/business/aroundregion/story/2017/apr/05/chattanooga-lighting-company-suing-mayor-andy-berke-epb/421391/>
2. <https://newschannel9.com/news/local/faulty-street-light-in-chattanooga-keeps-neighborhood-dark-residents-concerned>
3. <http://www.chattanooga.gov/about-chattanooga/>



THE STRESSCRETE GROUP

With manufacturing facilities in five North American locations, StressCrete Group produces an extensive line of high performance decorative outdoor lighting fixtures, decorative spun concrete and metal poles, plus pole arms and accessories, bollards and site amenities. We also manufacture a vast range of spun concrete poles for power distribution and transmission, sports lighting, high-mast lighting, and specialty poles for the electrical and communications industries. We are a family business that operates by the core values of honesty, integrity, compassion and respect to better the lives of our employees, their families, our customers and the communities we represent. StressCrete Group services multiple market segments through three divisions:

- StressCrete Ltd., established in 1953, is the longest-operating, most experienced manufacturer of spun concrete poles in North America. With plants in Alabama, Kansas and Ontario, we offer the broadest, most diverse range of spun concrete poles and bollards in the industry, with quality second to none.
- King Luminaire Co. Inc. produces a comprehensive assortment of high-performance outdoor luminaires, metal poles, pole arms and accessories, plus bollards and site amenities. With an array of state-of-the-art LED Technology and HID optical systems, and plants in Ohio and Ontario, King Luminaire is a North American leader in the outdoor lighting industry.
- KingCast Inc., the newest division of the StressCrete Group, is a gravity die cast (permanent mold) supplier of high-quality aluminum and zinc products to various market segments in the manufacturing industry.

At StressCrete Group, we provide every customer with the highest quality innovative products and work as a team to create and maintain life-long customers through world class service.