

Cline Bettridge Bernstein Lighting Design

The lighting of an office building, retail store, hotel, casino, or restaurant is of course a critical component to any new construction or renovation. However, a lot more goes into the lighting than meets the eye. Lighting designers work closely with a project manager to assess the ultimate goal of the space and recommend the proper solution to meet their budgets, energy guidelines, sustainability goals, or simply the aesthetic affect. The lighting of a space plays a functional role when it comes to safety and proper visibility. But it also establishes an emotional connection as the lighting is used to set a tone or theme. The role of the lighting designer is critical as the decisions made around how to use lighting can make the difference between an ordinary space and one that truly engages its visitor.



Are LEDs the Right Lighting Solution?

Since its founding in 1985, Cline Bettridge Bernstein Lighting Design (CBBLD) has consistently been on the forefront of lighting design, providing innovative, creative and sustainable solutions to architectural firms. The New York City-based firm, which is a member of the United States Green Building Council, designs sustainable and LEED® specified designs for architectural projects. CBBLD counts notable corporate, government, institutional, school, library, parks, residential and entertainment clients within its vast and award winning portfolio of work.

Led by principals Francesca Bettridge, IALD, IES, LC, and Stephen Bernstein, IALD, IES, who have guided the firm since its founding, CBBLD delivers the highest level of customer service to clients that have a vision for the appearance and function of the their space. Bettridge and Bernstein are actively involved in each of the firm's projects, infusing CBBLD's innovative, sustainable creativity into the work while ensuring that project goals are met, and each client's vision becomes a reality. They also serve as strategic advisors to clients on choosing the best solution for their projects even if it means guiding them in a different direction than the client initially intended.

A hallmark quality of CBBLD is the firm's commitment to sustainability. When beginning a new assignment, the firm's designers carefully examine the needs of each client and create designs that utilize energy-efficient components, including fluorescent, low wattage halide and LED sources. Recently, the firm has focused much of its energy on developing LED-based designs for its clients.

Recognizing that LEDs are the leading trend in the future in lighting, and hearing from more and more clients who want to use them, CBBLD closely examines how LEDs can best complement and achieve the goals of their project. As pioneers in the use of LEDs in architectural lighting, CBBLD speaks from years of experience to counsel clients on how they can most effectively install LEDs and whether they are truly the right solution for their needs.

CBBLD has found that LEDs are often the ideal solution for projects requiring cove or other continuous lighting installations, as increasingly stringent energy code legislation has made it more challenging to use alternative lighting solutions, such as fluorescent, cold cathode, neon and/or halogen.

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LEDs also stand out when projects call for large illuminations, such as wall grazing or flood applications due to their narrow point distribution. Smaller and narrower architectural details also benefit from LED technology as the small size of LEDs allows for the creation of small fixture packages, perfect for highlighting these features. Additionally, the long life of LEDs makes them appealing solutions for many projects as they require less frequent changing and maintenance.

A Pioneer in LED Lighting Design

CBBLD started studying LEDs for use with architectural applications more than ten years ago, long before they were commonly being considered as a general lighting solution. In that time they have learned a great deal about LED use and application and how the technology can be best utilized for their clients. One of CBBLD's first attempts to use LEDs in their design was for the tower crown of the Time Warner Center in New York City in 2000. LED strips were selected to illuminate a series of direct view vertical stripes because of the installation's difficulty to access, for which the long life LEDs offered a perfect solution.



At this early stage in LED technology, CBBLD had to develop their own custom luminaires, because existing architectural fixtures were not yet able to accommodate the new LED strips. CBBLD met many challenges with this project as LED technology was in its infancy.

As the LED industry has matured and the request for LED installations has continued to increase, CBBLD has chosen to partner frequently with LED Systems provider Traxon Technologies. Traxon has a similar commitment to its customers, featuring an unrelenting dedication to creating the right high-quality LED solution to translate the vision of the lighting design into reality.

Benefits of LED Lighting Applications: Bright and Flexible

CBBLD now often implements an LED system as part of a design because of its ability to provide good color temperature white light that will illuminate a building exterior in an energy-efficient way. However, the use of LEDs also provides several additional benefits. In the case of the Brooklyn Academy of Music, CBBLD was tasked with designing a solution that would both illuminate the institution's exterior entrance with energy-efficient white LEDs, and offer the ability to customize the lighting to create different color schemes and effects that illustrate a theme and enhance specific performances.

Working with Traxon, the firm developed an illumination plan for the front of the main building, which additionally serves as the home for the venue's offices, studio spaces, production facilities and the Gilman Opera House. Traxon's grazer strip allowed CBBLD to incorporate into their design the flexibility and customization the client desired. With Traxon's technology, CBBLD was able to illuminate the space at Brooklyn Academy of Music with a warm, tunable white light which would blend well with adjacent halogen light sources, and also provide the school with the ability to display RGB color schemes, as well.

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In other cases, clients may choose to use LEDs because of the flexibility they offer. In the case of Terminus 200 in Atlanta, it was the ability to install the LEDs into narrow, hard to reach spaces which are not conducive to traditional lighting solutions. The use of long-life LEDs was an ideal solution because of their long lifespan, which would minimize recurring maintenance and associated costs. Not only were Traxon white LED strips the most convenient option, but after testing a number of sources, CBBLD concluded that the strips offered the best light distribution and aesthetic appeal as well.

Other notable installations featuring CBBLD designs are Seven World Trade Center, New York, NY; Frederick P. Rose Hall, home of Jazz at Lincoln Center, New York, NY. Currently under construction is Eventi, a multi-use tower located in New York, NY. CBBLD has partnered with Traxon Technologies on many of these LED lighting projects, because like CBBLD, Traxon's approach is customer-centric, creatively finding ways to customize the right LED solution to meet the ultimate vision of the lighting designer and architect.

CBBLD's Sustainable Future

Since its first foray into LED technology, the industry has made great strides and new LED products on market allow CBBLD to be increasingly creative with their use of the technology and push the boundaries of architecture and lighting design. LEDs also offer the added benefit of reducing energy consumption, which is important to CBBLD when addressing green design issues both now and in the future.

