GSC GROUP

Project: GSC Group Location: New York Architect: Skidmore, Owings & Merrill

Lighting Design: Cline Bettridge Bernstein Lighting Design

Challenge:

Collaborate with the architect and the project's visual artist to bring to life the digital Central Park-themed art piece commissioned by the GSC Group. Consisting of various-sized decorative glass, sandwiching a thin film overlay, the art piece required even backlighting to bring the digitized tree imagery to life.

Solution:

► Lighting designers CBBLD worked with SOM to first gain some space between the art pieces and the office walls to create an area to install white LEDs at the top and bottom of the cavity. Set in at precise angles, the LEDs provide even illumination over all regions of the wall.

RECENTLY FETED BY IESNY, NEW

York-based Cline Bettridge Bernstein Lighting Design (CBBLD) was recognized by the society with a Lumen Citation in the Featured Visual Element category for its illumination of a glass art feature wall in the Manhattan headquarters of GSC Group.

The New York financial firm sought to humanize its hightech workplace by incorporating pixelized images of nature along its walls. The idea was to give the offices the look of an upscale boutique hotel or spa environment. Artist Cory Arcangel worked with the idea of digitizing leaves and trees and imagery from nearby Central Park. "The artist wanted it to speak to the park view-bring outside inside and create a conversation between the two," says CBBLD Principal and founder Stephen Bernstein.

Up close, the design is abstract, yet verdantly green. "As you look down the hall, it crystallizes into different resolution," explains Bernstein.

The feature wraps around the core of the space, unifying diverse areas, such as a conference room, offices and the trading floor of the two-story office. When architect, Skidmore, Owings & Merrill approached CBBLD to illuminate said feature, the lighting designer had no idea that by the conclusion of the project, the element would double in height in many places. "At some point they decided they really wanted the effect to go two stories," recalls Bernstein.

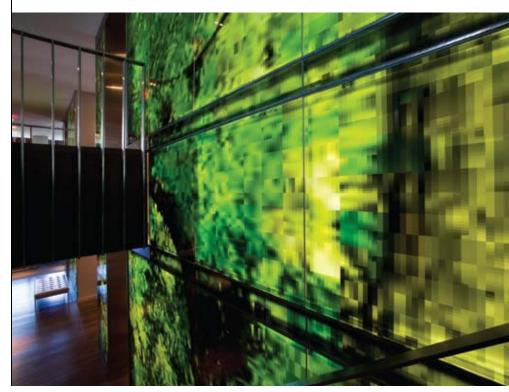
But to make it work, Bernstein needed extra room. SOM agreed to push the wall out another 1 ft., 4 in., in order that CBBLD could backlight the glass to create a more dramatic effect. "It's not often that an architect either wants to, or is able to, alter their design to realize a very special design. But the designers at SOM

HUMANIZING HIGH-TECH

FACING A CENTRAL PARK LOCATION, CBBLD BRINGS NATURE TO LIGHT AT THE GSC HQ.

> Story: Megan Mazzocco Photography: Paul Warchol







BEHIND THE WALL

LEDs provided the directionality CBBLD desired;
CBBLD convinced the architect to push the art piece 1', 4" from the wall to better backlight the feature;
for the 2-story portions of the art wall, a pair of LED strips were used;
A mock up helped to determine the exact angle of each LED strip light in order to light the wall surface evenly;
P. B LEDs were placed at the bottom and top of the cavity and were angled slightly toward the wall so the back surface of the wall would uniformly light the decorative glass.



were up for it," notes Bernstein.

Indeed, he says, a constructive give-and-take provided the team a rare opportunity to achieve something unique.

But illuminating the glass feature was not without drama of its own. Evenly rear-lighting the 250-ft.-long, 2,200-sq.-ft. art piece proved difficult on several fronts: First, delivering the lighting within the allotted energy budget; second, allowing for access space for maintenance; and finally, having to work with an unusual material, the thin film material which the artist had selected as the substrate for his work. Having had a lot of experience illuminating glass, Bernstein knew he would have to base the

◀ OFFICE OR SPA?

Characteristic of a hotel or hospitality setting, the illuminated art wall is a unifying element in the GSC office design. The heart of the floor plate, it spans corridors connecting reception, offices, conference areas and even a trading floor.

illumination strategy on the material, which ultimately, would be laminated between two layers of glass. "Whether architect or artist, we are reacting to a design. We are given something; we take our interpretation and our take on it," says Bernstein.

According to CBBLD associate Sang Lee, LEDs were chosen as the lighting medium because of their directionality. Lee specified Traxon grazers which employ lensing that directs a shallow and flat light beam in specific direction. This gives designers the ability to shift the beam up or down to uniformly light the wall.

For the one-story portion of the installation a single strip was placed at top and bottom. The LED fixtures are slightly angled back toward the wall allowing the back surface of the wall to be lighted evenly. "It becomes a second source that illuminates the back wall evenly," explains Lee.

For the two-story portions of the feature, CBBLD used a pair of strips at the bottom and two strips at the second floor. One was angled high and other low, allowing even illumination.

Bernstein's experience with LEDs on the project is mixed. He had hoped the LEDs used in the design could have been brighter, allowing the team to dim them back for efficiency. At the time of the specification, however, it was not possible.

Today the lumen output of the technology has improved to allow such a strategy, but because of its limitations, CBBLD tweaked the GSC design by selecting more foliage portions of the pixelated "trees" and by requesting the printer use lower levels of ink saturation in order to achieve the desired transparency.

They did so by making the planes on either side of the corridors glow with highlighting for the middle of the corridor achieved with MR16 accent lights. As for the "radiating light" that appears to emanate from the wall, "we didn't calculate that," admits Bernstein. "It's more about understanding the psychology of light, rather than hitting a specific number here," says Bernstein.

As for working with the thin film substrate, he says the artist called the shots. "Sometimes a thought will be put out, like: 'we just want it to glow' and then we have a little more influence over materials," says Bernstein. "But this was very specific; it really was an art piece."

Lighting Designer: CBBLD Lighting Design, <u>www.cbbld.com</u>, Circle 217.

PRODUCTS USED:

Traxon (linear LED strip lights), <u>www.traxon.com</u>, **Circle 216.**