FEATURED PROJECT

# Miami Nice

## 21st-Century Lighting Illuminates New Miami Beach Icon

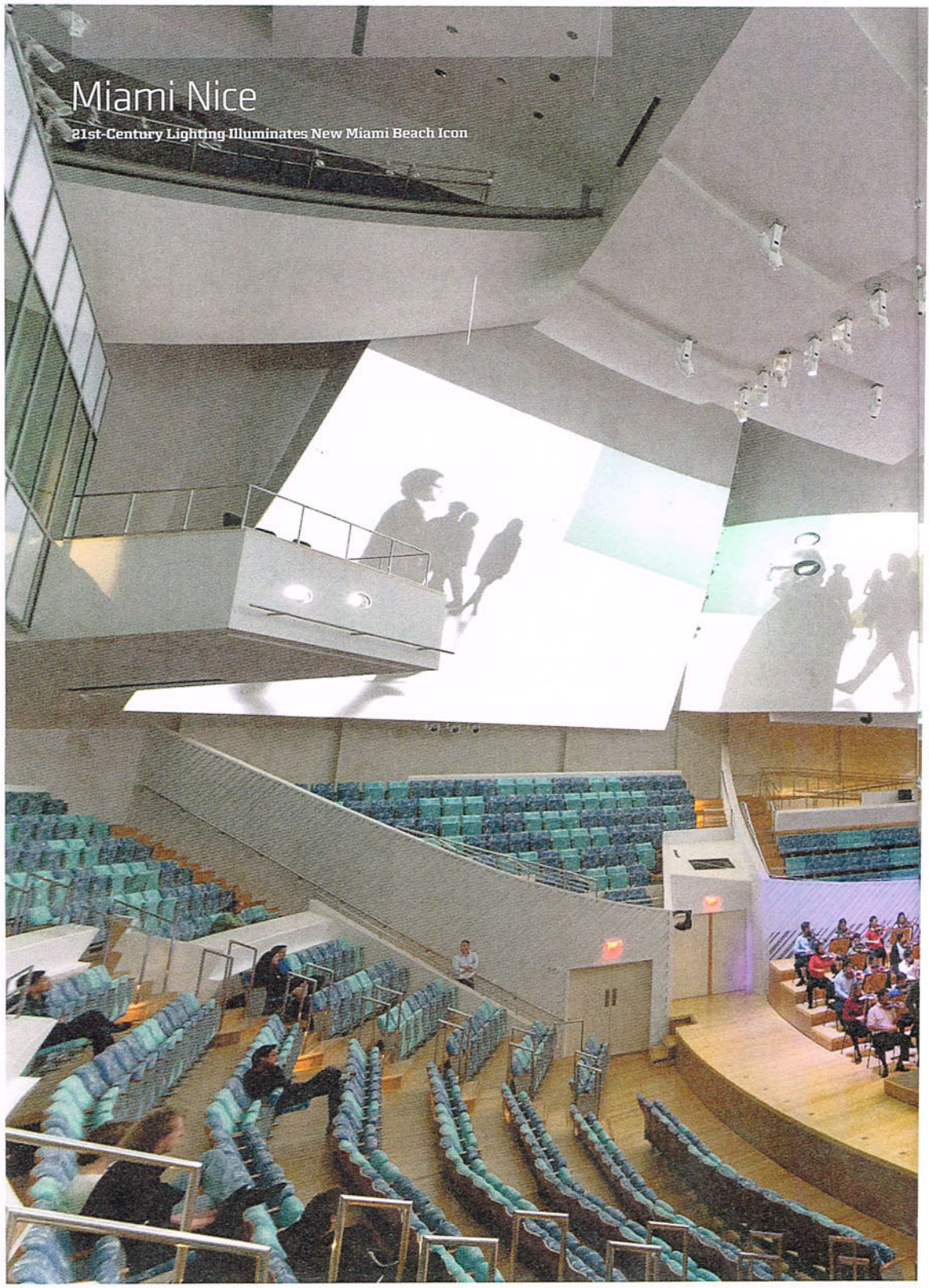
**The New World Center**
Miami Beach

**Owners:** New World Symphony
**Architects:** Gehry Partners, LLP Los Angeles
**Landscape Architect:** West8
**Lighting Design:** Lam Partners, Cambridge, Mass.
**LED product manufacturers:** Philips Color Kinetics; ETC DMX controls; MP Lighting

**Text:** Ellen Lampert-Gréaux
**Photos:** Claudia Uribe, Emilio Collavino, World Red Eye

**The Challenge:**
Frank Gehry, in a sequel to his beloved Disney Concert Hall in Los Angeles, has introduced a new cultural landmark to Miami Beach: New World Center, a stunning, purpose-built home for the New World Symphony. Architectural lighting was designed by Lam Partners Inc., with Paul Zaferiou as principal in charge. "We have collaborated with Gehry and his office since 1991, for the first design phase through construction drawings for the Walt Disney Concert Hall, then for the Guggenheim in Bilbao, Spain," explains Zaferiou. "He promotes an integrated design style that we buy into."

In this case, however, the geometry of the building is unusual for Gehry in that it is relatively calm on the outside, yet dynamic on the inside. "Frank was picking up on the ambiance [of the neighborhood], and the building is very well suited to its location." Sunlight by day and electric light by night defines the design concept.



**The Solution:** Lam didn't come to the table with any preconceived ideas. "Gehry likes the lighting to come from the architecture, and we do as well, so it's a good mix," says Zaferiou. The real magic, of course, happens after dark: "At night, the central atrium glows from within, the expressive curving forms dancing in the grand volume," he says.

In the concert hall, to light the swooping, plaster acoustical "sails," adjustable top-access Edison Price PAR56 fixtures are clustered between the sails and the central ceiling cloud—a square pillow shape that comes down in the center of the concert hall and contains a lot of the theatrical lighting for the stage. "The sails read by day-

The center features a flexible and technologically sophisticated 756-seat performance hall whose walls are large, curved "sails" that surround the audience to acoustically reflect sound. A defining architectural feature, the sails also serve as built-in projection surfaces for 14 high-definition Christie Digital projectors and a coolux Pandora Box media server system.

light as solid forms almost like being in a tent, transformed by electrical light at night," Zaferiou adds.

The cloud is rimmed with Philips Color Kinetic's color-changing LED iColorCove fixtures, programmed to work alongside projections, or simply provide a soft glow. The control of these fixtures can be coordinated with the color-changing fixtures that light the façade of the center's parking garage during special events. "These are exactingly aimed to bathe the seating areas with light, without any spill light on adjacent sails," notes Zaferiou. LED aisle lights by MP Lighting are integrated into seats. LED strips, under foot rails, light ramps.

### A Great, but Simple Statement

Open since January 2011, the 100,641 sq.-ft. building serves not only as a concert hall, but an educational center for this innovative ensemble. The success of the building is based on a close collaboration between long-time friends Michael Tilson Thomas, the symphony's conductor and founder, and Gehry, who has also designed the Richard B. Fisher Center for the Performing Arts at Bard College.

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*"One of the toughest challenges we faced was focusing every architectural fixture in the building," recalls Zaferiou. "There are recessed fixtures in the hall to accent the seats, with an upper catwalk system for access. We had to shoot light between the sails, yet not light the ceiling surfaces, and no stray light could touch the protection surfaces."*

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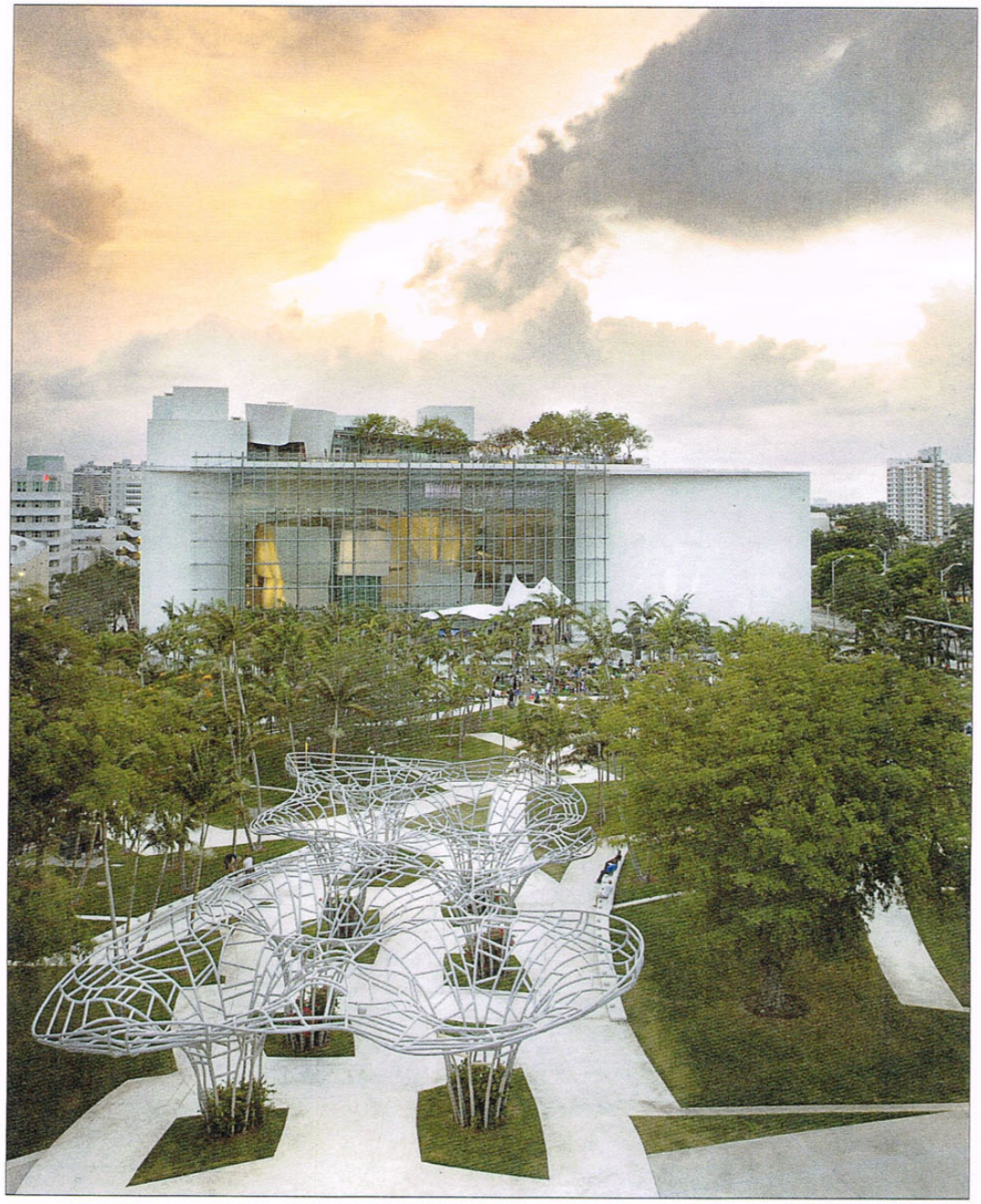
Located in the heart of the art deco district, it's Gehry's first commission in Florida, and is finished in white stucco to echo its environment, rather than the architect's signature metallic cladding. Yet it features distinct exterior features: an 80-ft. soaring glass wall on the east façade that combines with a 7,000-sq.-ft. projection surface, which allows concerts, art and films to be experienced from the adjacent park.

The building's technical sophistication is wired to the Internet so that students and musicians can link to anyone in the entire world. "The lighting is folded into that as well," says Zaferiou. "The lighting appropriate for broadcast represents an extra layer of complexity we added in the practice and rehearsal rooms, with large screens and



### THE RIGHT TOUCHES

On the façade, the box office is another geometric form with a canopy, like a shape that has tumbled outside, and is lit with Philips Color Kinetics LED ColorBlast fixtures spilling down for a soft glow at night. On the roof garden, BK halogen ground spikes on a dimming system provide animation by uplighting the trees, while simple LED downlights on a tension cable provide pools of light for special events. LED strips under the raised benches wash the floor, and are tied to the egress system.

cameras, plus broadcast-quality fixtures, linear fluorescents, with high output, bright, not too hot, good color, and we specified them with low-brightness louvers on the front. These are also hung on perimeter light bars, and can interchange with halogen fixtures if need be, as they can set up the rooms in various configurations."

Of course, as a symphony hall, acoustics are critical, especially in the coaching and practice rooms. The challenge, according to Zaferiou, was how to keep the lighting fixtures as quiet as possible. The solution was the DALI ballasts in all coaching and practice rooms.

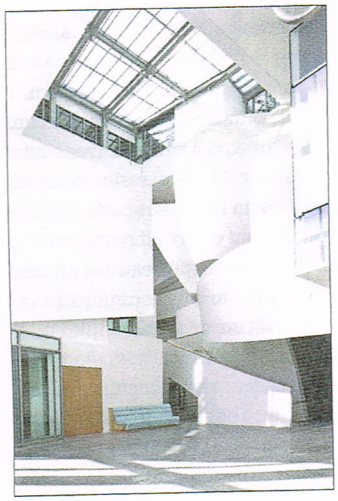
The concert hall presented its own difficulties. For acoustic and architectural purposes, the venue is surrounded by Gehry's signature sails, which also serve as built-in projection surfaces for 14 high-definition Christie Digital projectors and a coolux Pandora Box media server system. But while cool and technologically sophisticated, they were still walls. "One of the toughest challenges we faced was focusing every architectural fixture in the building," says Zaferiou. "We had to shoot light between the sails, yet not light the ceiling surfaces, and no stray light could touch the protection surfaces."

Control is via an ETC system with DMX control, with all house lights tied into the theatrical system with a separate set of dimmers for seamless control of the building. Custom-designed ETC wireways connect multiple light sources to central panels, and special pre-sets are programmed for lighting in the atrium.

The spirit of the center, which has created cultural excitement and community involvement in Miami, has been cited with a 2012 AIA Institute Honor Award for Regional & Urban Design. It's a well-deserved honor for a successful urban collaboration, in which 21st-century lighting adds a defining touch.

### BRINGING ART TO THE NEIGHBORHOOD

Fairly simple for a Gehry exterior, the New World Symphony Center, nonetheless, features two distinctive elements: an 80-ft. soaring glass wall on the east façade that combines with a 7,000-sq.-ft. projection surface, which allows concerts, art and films to be experienced from Miami Beach SoundScape, an adjacent 2.5-acre park. The former, according to Zaferiou, comes alive after dark: "At night, the atrium glows from within, the expressive curving forms dancing in the grand volume." This was at the direction of project architect Craig Webb, who wanted to light the people in the building to enhance the feeling and envelop the atrium in color.



## FREE FORM

The atrium, according to Zaferiou, is the main lobby, and is filled with spaces spiralling from top to bottom, in rooms referred to as "box forms," which include a two-story multi-purpose room, ensemble rooms and recording studios. "It's a collection of stacked forms, almost like buildings with streets between them. At night they almost float; I really like the transition," says Zaferiou. "They're all playful geometric spaces, all acoustically isolated, yet with small windows, so that daylight can be borrowed from the atrium."

Housed within the geometric volumes that define the shape of the atrium, the multi-purpose room and ensemble rooms contain flexible solutions comprising preset ETC controls, Brightline fluorescent broadcast fixtures for video lighting, Ledalite fluorescent cove uplights, and Elliptipar wallwashers for ambient illumination. All of the linear fluorescent cove fixtures use DALI ballasts for optimum acoustical performance.

## A NOVEL PARKING EXPERIENCE

Parking garages in Miami today aren't satisfied with simply performing their basic task as structures for the temporary housing of vehicles. Rather, they have become multi-level art icons on the urban scene. For example, at 1111 Lincoln Road, the garage itself features retail, dining and event spaces. Not to be outdone, the garage serving the New World Center achieves icon status in its own right.

The parking facility had to uphold not only the creative architectural expression of the main facility, it also had to complement the new city park in front of the symphony building. Ground level space is occupied by retail, with the five upper levels for parking. Architect Frank Gehry's utilitarian rectangular façade is transformed into a three-dimensional canvas wrapped in a veil of woven metal mesh panels supplied by GKD-USA and illuminated by LED color-changing fixtures. Wrapping three sides of the pre-cast concrete building on levels two through six are 49 GKD Helix 12 panels, totaling 25,870 sq. ft. of the firm's Illumesh Metal Fabric. The product's surface reflects the lighting to create solid expanses or programmed patterns. Its three-dimensional stainless-steel weave satisfies requirements for Miami area's high salt environment and will withstand hurricane-force winds.

A continuous cantilevered channel was constructed around three sides of the garage to accommodate two rows of linear Color Kinetic Color Graze Powercore fixtures. "Colored light is washed up the surface of the GKD metal screen, evenly lit from below," says Carlene Geraci, project manager and designer of the system for lighting designer Lam Partners. "The custom channel is about 12 in. wide to house the Color Graze fixtures, with the distance of the assembly approximately 20 inches off the face of the façade," she explains.

Geraci specified 10-degree narrow beam angle RGB LED fixtures with 17.5-watts/ft to achieve an even grazing effect on the screen. "Within the custom channel, the inner row of fixtures is aimed to capture the lower portion of the screen wall, while the outer row is aimed to target the top of the wall," Geraci says.

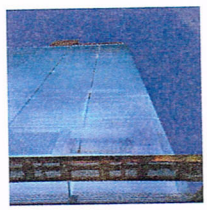
Controls for the output and color of the LED fixtures is via Color Kinetics Light System Manager, comprised of the Light System Engine controller hardware and Light System Composer design software. A link was installed from the garage's LEDs to the color-changing fixtures within the New World Center's concert hall. Multiple data enablers transfer the data signal from the controller to the fixture. "The color shows on the center's façade can be triggered from within the Concert Hall itself to coordinate with their performances, along with holidays and special events," Geraci explains.

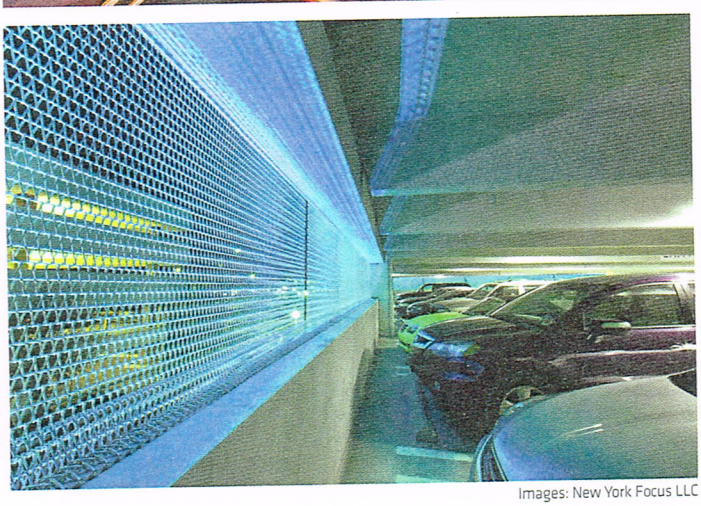
A 2011 Award of Excellence for New Parking Structures was presented to the New World Symphony Center Garage by the Florida Parking Assn.

–By Vilma Barr

## URBAN ART

Thanks to a combination of metal mesh and color-changing LED, the parking structure for the New World Symphony Center achieves icon status in its own right.





Images: New York Focus LLC