



Atrium

Sunlight illuminates this grand staircase during daytime hours. After dark, a photosensor controlled system with fixtures concealed within the skylight structure provide safe passage along with Shaper modified and custom bowls. Shaper custom wall sconces accent the vertical plane.

Farmer School of Business

Miami University, Oxford, Ohio

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COOPER Lighting

Endowed by Richard and Joyce Farmer, the Farmer School of Business is an academic division of Miami University in Oxford, Ohio. At 218,000 sq. ft. it became the first LEED building on campus and started an initiative toward green design. The red-brick building, built in the same Colonial-Georgian style as most of the rest of the campus, houses classrooms, offices, a 515-seat auditorium, common areas, a cafe and other uses. The lighting design contributed to the Silver rating with a lighting power density of 20% less than energy code.

For Ardra Zinkon, director of lighting design for Tec Inc. Engineering & Design, the major lighting challenge was how to marry this traditional aesthetic with performance-quality light fixtures that would meet the LEED target goals.

“We were really looking for a way to enhance the grandness of the architecture, meet the students’ needs and the flexibility requirements of today’s classroom environment, and of course achieve the ever-present LEED goals,” she says.

The general strategy involved layering the lighting system to include functional task lighting, decorative lighting and lighting used to highlight the architecture. Custom and standard Shaper pendants and sconces provide efficient decorative lighting in many spaces, with Portfolio and IRiS downlights providing perimeter lighting and Metalux and Corelite providing general lighting. In many cases, various light fixtures performed multiple roles, providing both function and aesthetics. As the campus standard required a neutral color for all light sources (4000K), fixtures were specified with a warm haze as a reflector finish to make the illuminated spaces visually warmer. Many fixtures are dimmable for scene selection and interaction with advanced control strategies such as daylight harvesting.

“The space is architecturally grand and beautiful,” says Zinkon. “The decorative luminaires are very much the jewels of the building. The amount of windows allows a combination of both artificial and natural light. It is truly a wonderful space.”

She adds that she chose Cooper products for their ability to meet the performance needs of the spaces, while the custom Shaper products helped to keep the project on target to meet the reduced lighting power density levels and maintained decorative aesthetic.

“Quality lighting design easily goes hand in hand with sustainability,” Zinkon concludes. “Innovative products allow designers to still be creative and artistic in their approach and be energy conscious at the same time.”



Commons

Custom Shaper two tiered chandeliers were designed for the commons serving to welcome occupants to the space. A single tier version was created for the adjacent lower commons area. Recessed 150W CMH downlights provide supporting illumination. The row adjacent to the windows is tied to a photosensor for daylight harvesting.



Reading Room

Shaper high-performance decorative and Portfolio downlights illuminate the Reading Room. The modified bowls incorporate an inner circline lamp controlled separately from the indirect component located in the optical pan. Automated shades aid in glare control and increased functionality.



Trading Room

Corelite T8 product utilized a downlight isolator for separately controlled task lighting during presentations. The two outboard lamps provide direct and indirect light into the space. IRiS adjustable accent fixtures were used for instructor focal lighting. Portfolio downlights (6-inch, 32W) graze the perimeter walls.



Classroom

Metalux Accord luminaires with T5HO lamplighting meet the reduced LPD target, and allowed increased fixture spacing. Portfolio downlights (6-inch aperture, 32W) were used on the perimeter to graze the walls. Fail-Safe LED steplights were used as all classrooms contained stadium seating. All classrooms were dimmable and included four scenes.



Lower Level

This lower level corridor off the Atrium stair showcases one of the many configurations of the custom Shaper luminaires within the building.



Auditorium

Custom Shaper high-performance luminaires incorporate a circline lamp for the bowl and an indirect high-performance optical pan. Fully dimmable, they add additional flexibility to the space and fit well within the grand architecture of the building. The custom Shaper create a pleasing pattern on the gently curving wall.

The CFL custom Shaper wall sconce in the Auditorium meets ADA requirements as the design included locating the dimming ballast inside the wall with an access panel, rather than allowing a larger projection into the space.



Project Credits

- Project: Farmers School of Business, Miami University, Oxford, Ohio
- Architect: Robert A. M. Stern Architects (RAMSA)/Moody Nolan, Inc.
- Electrical Engineer: Heapy Engineering
- Lighting Design: Ardra Zinkon, Tec Inc. Engineering & Design, IALD, MIES, LEED GREEN ASSOCIATE
- Cooper Lighting Brands: Corelite, Fail-Safe, IRiS, Metalux, Portfolio, Shaper
- Photography: Scott Pease Photography

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