



Photos: George Gruel

Ultra Modern

With new lamps in place, MoMA's restaurant does its name proud

BY PAUL TARRICONE

Which discipline—modern art or lighting design—has experienced the most upheaval over the past eight years? The case for both can be found within the confines of the Museum of Modern Art in New York City. Exhibits, of course, have changed more frequently, but the lighting scheme in MoMA's restaurant The Modern has become just that, as LEDs have replaced the original halogen MR 16-based system.

"We were approached by the original design architect, Bentel & Bentel, and the owner, Union Square Hospitality Group (USHG), to propose solutions to improve the lighting," says Dan Weinreber,

Kaplan Gehring McCarroll Architectural Lighting, El Segundo, CA.

USHG had a number of concerns with the original lighting, as well as a specific wish list for the new system. The first concern was the difficulty in maintaining the prior system—"the building engineering staff was not always available," he says. Second, was reliability, as sockets in low-voltage xenon striplights had deteriorated over time and no longer worked, halogen MR16 downlights were somewhat difficult to change and fluorescent dimming ballasts were failing. Heat was the third factor: "Heat from MR16 halogens restricted the type of wine stored in the wine wall behind the bar."

LED lamps took over for halogen MR16s in the track fixtures, while concealed linear LEDs replaced exposed xenon striplights around the polished stainless steel columns.

As for the retrofit parameters, new lamps had to at least maintain the prior lighting quality and, in a busy restaurant, the retrofit had to be done quickly: "Work was to be done after hours and allow for the restaurant's continuous operation from lunch through late dinner every day," says Weinreber.

Despite MoMA's affinity for most things modern, USHG wasn't exactly enamored of the latest in lamp technology, recalls Weinreber. "USHG owns/operates many restaurants and has tried other LED retrofits. They have been disappointed in the quality of light with some LED retrofit lamps in other restaurants," he says. To gain their approval, "we orchestrated in situ mock-ups to convince the owner that LED provided the appropriate quality of light.

Some mock-ups were wired directly to the existing control system to demonstrate and verify dimming performance. Our goal was to design a retrofit solution that would minimize any infrastructural work (wiring and ceiling demo). Because dimming is an absolute necessity, we set out to find LED replacements that would work with the existing centralized control system. This limited our fixture options but allowed us to avoid expensive new wiring or modifications to the Lutron dimming system."

FILLING OUT THE MENU

Once USHG signed off on LEDs, the bulk of the project involved swapping out all of the MR16s in recessed and track fixtures in the

The bar area is replete with new sources, including recessed LEDs in the ceiling, linear LEDs in the bottle risers (inset) and linear LEDs behind the blue glass below the bar countertop.



Floral arrangements have been illuminated for the first time using custom adjustable accent lights. One of The Modern's two "undulating glass walls" (shown to the right of the rear floral arrangement) leads to a private dining room. Linear LEDs replaced fluorescent striplights behind this wall.

dining room for LED replacement lamps (the Vivid lamp from Soraa). The lamp was specified for its color rendering, color consistency, dimming and expected lifetime, says Weinreber.

Elsewhere in the eatery, LEDs replaced other sources, adding a dash of visual flavor throughout. In two applications, linear LEDs (Philips Color Kinetics) were installed behind undulating glass walls and in an in-floor trough. Linear LEDs (2,400K) were placed around the stainless steel columns that pierce the dining room, in coves around the drop ceiling plane and in the bottle risers behind the bar. Meanwhile, the high ceiling recessed downlights in the dining room are now equipped with AR111 LEDs (Acuity) aimed at the tables.

After eight years, other areas of the dining room are now lighted for the first time. Flower arrangements on the dining room tables are accented by custom adjustable LED lights (Tokistar) mounted within existing metal skylight louvers in the high ceiling. Wait sta-

tion LED task lighting (Albeo) was also added. "The entire front-of-house space is now LED," says Weinreber. ■

METRICS THAT MATTER

The Modern

Watts per sq ft: 0.9 (complies with ASHRAE-IESNA 901.-2007 and 2009 IECC)

Lamp Types: 2

Fixture Types: 15

THE DESIGNER



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