

Client:

The Bently Reserve San Francisco, CA

Chris and Amber Marie Bently, Owners

Mark Mayfield, Bently Reserve Chief Engineer San Francisco, CA

Architect: nicholsbooth Architects San Francisco, CA

Electrical Engineers: Michael Kim, P.E., CB Engineers San Francisco, CA

Glumac San Francisco, CA

Bhatia Associates San Francisco, CA

General Contractor: BCCI Construction Company San Francisco, CA

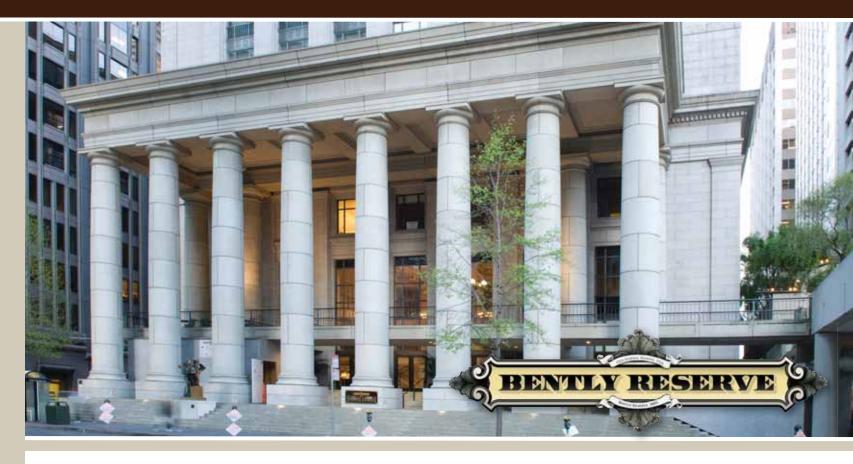
Electrical Contactor: McMillan Electric San Francisco, CA

Equipment Provider: Lutron Electronics Co., Inc. Coopersburg, PA

Tenant Space: Energy Foundation SmithGroup San Francisco, CA

case study | Bently Reserve

San Francisco, CA



One of San Francisco's landmark buildings is able to preserve its heritage and still meet 21st-century energy codes and strict environmental standards by introducing four state-of-the-art Lutron solutions: EcoSystem_{TM} lighting controls, GRAFIK Eye_® pre-set controls, Sivoia QED_® shading system, and Quantum_{TM} whole-building lighting and energy management solution.

"We take pride in being a principle-driven company that adheres to a strict set of core values. Lutron's sophisticated products helped us maintain those values by successfully bridging this building's heritage with present-day eco-standards."

Mark Mayfield

- Bently Reserve, San Francisco

When the Bently Reserve & Conference Center in San Francisco, CA underwent major renovations, every step of the process aligned with the Bently's objectives to be environmentally friendly while preserving the building's heritage.

Mark Mayfield is Bently Reserve's chief engineer. "Bently Holdings has a strong commitment to San Francisco and the environment," he says. "That commitment is apparent in the design of The Bently Conference Center. A great deal of care was taken to preserve many of the original elements of the building, which are positively stunning. The materials and technology were thoughtfully



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selected to create a unique ambiance – maintaining the building's classic beauty while making it very green and functional. The beautiful flooring was selected from renewable sources; artificial lighting was designed to interact with the natural light, and our preferred caterers were selected based on quality, as well as their environmental practices."

Such attention to detail has paid off. The facility now stands out as a leader in San Francisco's green movement as it leverages its rich history alongside a growing concern for energy savings and sustainability. It has also led to the incorporation of innovative technology that gives the Bently Reserve a competitive edge.

For the ambience, technology and energy savings it would bring to the buiding, Bently Reserve decided to deploy Lutron lighting control technology throughout the core and shell of the facility. Tenants who would later rent the 150,000 square feet of office space were left to choose for themselves the lighting control systems in their individual spaces. All of them chose Lutron, too.

"Lutron's reputation as a leading manufacturer and innovator of environmentally friendly lighting controls worldwide prompted each tenant to also install Lutron products in their individual office spaces," said Gregor Stewart with ALR Associated Lighting Representatives, Lutron's representative for the San Francisco Bay Area. "Essentially, Lutron's core and shell requirements set the standard for others to follow. It's a challenging standard to achieve, but one that everyone is willing to embrace."

Lutron lighting systems not only help businesses make an environmental upgrade – they also work to achieve the perfect ambiance for any space. Selecting a system that would be the best fit for all needs of the Bently Reserve was a unique challenge for Lutron.

"Bently Reserve features much of the original architecture. For example, the banking hall has the original columns and there is a huge safe still on the premises," said Michael Kim, electrical consulting engineer with CB Engineers. "We had to consider these features, among others, as well as the overall ambiance of the building when selecting and installing Lutron's lighting solutions."

Additionally, the Bently Reserve's multiple-pane windows have been part of the building since its construction in 1924, and allow abundant daylight into each room. The lighting solution would need to take this feature into account.

Flexibility and precise control are attributes that extend to all Lutron products. To create the ideal

ambiance – an atmosphere of quiet sophistication – while meeting the needs of the building, owners agreed with the design team's recommendation to install EcoSystem[™] lighting control solution throughout the structure. GRAFIK Eye[®] preset architectural lighting and Sivoia QED[®] shading products were incorporated in the second floor conference rooms. Quantum whole-building light and energy management solution tied everything together, also facilitating integration with other building support systems.

Installed throughout the Bently Reserve, EcoSystem combines electronic dimming ballasts, controls, and environmental sensors. Components work together to manage light levels in occupied spaces by automatically dimming when rooms have adequate daylight or are not in use. Manual controls offer personal adjustment of light levels, meeting a requirement for an integrated system that would allow individual tenants to control and monitor their own lighting.

With EcoSystem, tenants can reprogram their system as needs change over time, avoiding construction costs. "Should new tenants move into the office space over the years, the lighting system can be suitably reconfigured to meet the specific requirements of these tenants, regardless of whether they need to individually light multiple offices or light a wide open space, such as a large conference room," said Audwin Cash, a Product Manager for Lutron.

The second floor of the Bently Reserve contains videoconference rooms available for public use. Lutron used a GRAFIK Eye preset architectural lighting control unit with automatic Sivoia QED controllable shading products on the building's original windows. The intuitive GRAFIK Eye system is used to create, store, and easily recall preset scenes that adjust the levels of lights and shades. Stewart notes, "The decision to install GRAFIK Eye in these conference rooms stemmed from the fact that we wanted to create an environment that is not only technologically adaptable to various presentation needs, but one that is also easily controllable."

Mayfield offered another explanation of the benefits provided by the GRAFIK Eye/Sivoia QED combination: "The clients who would rent out these conference rooms would have the option of using the preset specific intensities to control all the lights and shades without the need to remember settings. Presenters can control the lights using the GRAFIK Eye system from any point in a room via remote control, and the Sivoia QED shades work with the GRAFIK Eye system to further support presentations, as the presenters can adjust shades differently for video presentations, group discussions, or other work." To tie everything together, the Bently Reserve uses Quantum[™] whole-building light and energy management solution. Quantum monitors, alerts, and reports on lighting energy usage, lamp outages, and more. The breakthrough system centrally manages electric light and daylight and can lower energy consumption by 40% or more, contributing to LEED[®] certification points. Building owners and facility managers gain total, simple control of the lighting system as well as the power to configure, monitor, analyze, and report on the lighting and energy data it collects.

Other building systems, such as heating and ventilation, were also updated during renovation. Lutron worked to ensure that Quantum would integrate smoothly. Through a BACnet (Building Automation and Control network) interface, Quantum connects to a central Building Management System (BMS). Quantum communicates the occupancy/ vacancy status to the BMS, which adjusts the new HVAC system to save energy.

"Lutron had to create modules specifically for this project in regards to system integration," said Kim. "Additionally, Lutron had to create a BACnet interface so that all the systems will be speaking the same language, essentially, and working with each other." Both the tenants and owners are excited about the fact that Lutron's updated lighting system allows the Bently Reserve to continue to maintain the rich history that has already established it as a landmark building, while helping the environment and accommodating the tenants simultaneously.

"We take pride in being a principle-driven company that adheres to a strict set of core values," Mayfield said. "Lutron's sophisticated products helped us maintain those values by successfully bridging this building's heritage with present-day eco-standards."

In a city, he might have added, where such values have become the norm.