

San Francisco City Hall—PL-T, MasterColor® & Halogená Lamps

A • C A S E • S T U D Y

By marrying a beloved historic building with the most modern lighting technologies from Philips Lighting Company, the designers and architects of the San Francisco City Hall historic renovation have brought forth a monument to civic pride. Horton•Lees Lighting Design, San Francisco, CA, developed the lighting to accentuate the grand Beaux Arts architecture, using 188 MasterColor® metal halide lamps to achieve appropriate color on the exterior, improve lamp life and lower the city's energy use. Illuminating interior spaces beautifully, 6,548 efficient PL-T compact fluorescent lamps are housed in 1,500 refurbished and new custom fixtures. In addition, 951 Halogená® lamps gleam inside hundreds of restored and replicated historic fixtures.



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Horton•Lees Principal Angela McDonald took great care to emphasize the magnificent façade designed by Bakewell & Brown in 1912. The entire City Hall façade is lighted with MasterColor lamps in Phoenix luminaires, with the exception of the dome. The façade was previously lighted with 300W incandescents, which, because of their short lifetime, were difficult to maintain. "With the 100W MasterColor we're getting the same light output for almost one-third the energy. [Plus] we were looking at a lamp life of approximately 750 hours and we've gone to a lamp with 10,000 hours—that's 13 times the lamp life," McDonald said. "This enables us to greatly reduce the city's cost of ownership."



JULIO CESAR MARTINEZ, PHOTOGRAPHER

McDonald chose 100W MasterColor PAR38 lamps. "We were looking to accomplish different things with one lamp—soft washes, grazing light and spotlighting—to bring out architectural details. In the PAR38 lamp we had the beam control we needed to effectively bring together all the different parts of the design. We were also looking for a lamp color to correspond with the incandescent light from historic lampposts at ground level and the incandescent light washing the façades of adjacent buildings. We were only interested in white light sources that are compatible with incandescent. The 3000K MasterColor light is warm, but slightly crisper than incandescent. We had good color; excellent lamp life for maintainability; energy efficiency; and beam control—all in one lamp."

"MasterColor® has become the cornerstone for lighting all the important buildings in San Francisco's Historic District. This enables us to greatly reduce the city's cost of ownership."

*—Angela McDonald
Lighting Designer,
Horton•Lees Lighting Design*

Let's make things better.



PHILIPS

PHILIPS LIGHTING MEETS THE CHALLENGE

Clark Manus, FAIA, Principal of Heller-Manus Architects, San Francisco, feels that the MasterColor® lighting enhances the architecture: "During the day City Hall has a nice whitish gray, silver color. And the color of the lighting at night does not shift the granite façade into something yellow. The building has very much the same presence at night as it does during the day...By lighting the colonnaded recesses, it actually accentuates parts that are not as visible during the day." McDonald added that washing the light gray granite façade behind the colonnades with MasterColor lamps makes the columns stand out in bold relief.

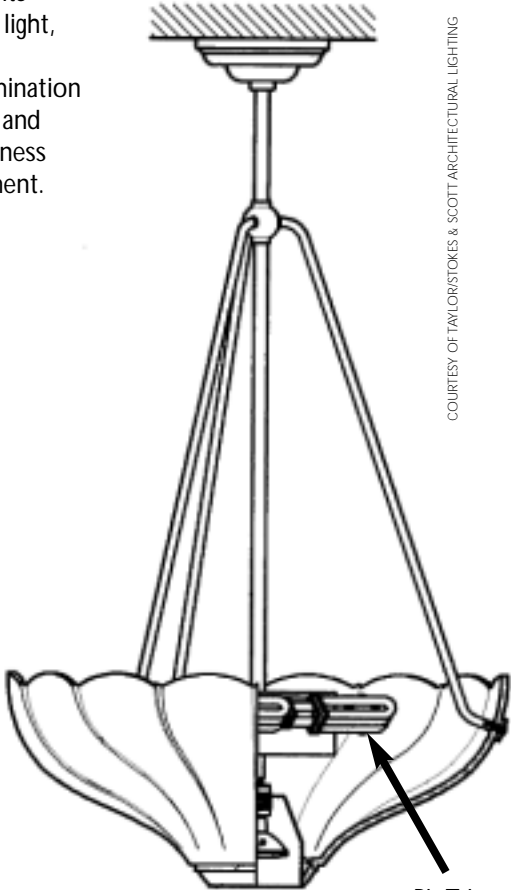
The flattering MasterColor façade lighting scheme is so successful, it has become "the cornerstone of the master plan for lighting all the important buildings in this Historic District," McDonald noted. City Hall is the centerpiece of San Francisco's Civic Center, a group of 12 edifices considered to be the greatest assembly of Beaux Arts architecture in the U.S. The newly renovated City Hall presents a monumental vista, with its lofty dome, the highest in the U.S. at 300 ft. (surpassing even the Capitol in Washington, DC).

For the interior of City Hall, with its city offices, hearing rooms, and council chamber, Horton-Lees and Heller-Manus worked together with custom fixture manufacturer Taylor/Stokes & Scott Architectural Lighting to design lighting appropriate for a modern civic building while retaining references to historic lighting fixtures. Their goal was to refurbish and adapt worn existing fixtures to modern lamp technologies, and to create new fixtures inspired by history.



BEVERLY DUPEYRE BOOS PHOTOGRAPHY

A beautiful glass bowl pendant, found only in photos and the architects' original drawings (no whole existing fixture remained), served as the template for the new office lighting fixture used throughout the building. More than six thousand 32W and 42W PL-T triple-tube compact fluorescents fill the spaces with light, providing excellent direct-indirect illumination for city employees and citizens having business with their government.



COURTESY OF TAYLORSTOKES & SCOTT ARCHITECTURAL LIGHTING

Above, Tax Assessor's office today, with elegant PL-T pendants. At right, archival photo of the Assessor's office, circa 1915.



COURTESY OF HELLER-MANUS

ELEVATION/ SECTION VIEW
TYPE P1 FIXTURE AS DRAWN

PL-T Lamps

"The neat thing about this job was that these decorative, historically correct fixtures are actually the workhorse fixture," said Bob Stokes, Owner of Taylor/Stokes, Sausalito, CA. "The PL-Ts provide the right amount of light, and the right quality of light, for the office workers." In addition, Philips PL-T lamp passes the U.S. EPA's Toxic Characteristic Leaching Procedure for non-hazardous waste, and boasts the ALTO® trademark, a symbol of environmental leadership.

Utilizing a total of 951 60W and 100W Halogená® lamps, Taylor/Stokes carefully refurbished more than 500 historic fixtures for City Hall and created many historical replicas. Of particular note are 148 cast-bronze torchieres and sconces that, after 85 years, have been restored to their original splendor. Atop these elegant bronze fixtures, 60W clear Halogená lamps sparkle brilliantly inside custom hand-blown, hand-cut, French lead crystal diffusers. Plus, Halogená offers three times the life of standard incandescents. "The white light looks great on the limestone, and the visual effect is very pleasing," McDonald commented.

Philips is proud that its PL-T, MasterColor and new Halogená lamps have been useful in enhancing such a beautiful edifice. Manus, the principal architect, notes, "The building has a soft, even glow; it's an inviting public building. The lighting also makes the bold statement that City Hall is the heart of city government and the foremost civic building in San Francisco."



BEVERLY DUPERLY BOOS PHOTOGRAPHY



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Elegant torchieres and sconces lighted with 60 watt Halogená® lamps beautify City Hall's interior. Altogether, 951 Halogená lamps illuminate the building, originally built in 1915.

Angela McDonald credits the entire team and the cooperative environment with the project's outcome.

- Architects Heller•Manus Architects
San Francisco Bureau of Architecture
Komorous-Towey Architects
Finger & Moy Architects
MBT Architects
- Historical Preservation Architects ... Carey & Company
- Refurbished & Custom Luminaires .. Taylor/Stokes & Scott Architectural Lighting
- MasterColor® Fixtures Phoenix Products Company Inc.

- Electrical Engineer FW Associates
- Audiovisual Consultant Smith, Fause & McDonald
- Electrical Contractor Rosendin Electric
- Mechanical Engineers SJ Engineers
Gayner Engineers
- Construction Management .. Turner Construction
- General Contractor Huber Hunt Nichols



BENEFITS OF PL-T COMPACT FLUORESCENT LAMPS

- Compact size fits into incandescent-style luminaires
- Long 10,000 hour life
- Energy efficient, up to 75 lamp lumens per watt for low cost of ownership
- 82 CRI in three color temperatures and four wattages
- Environmentally friendly—ALTO® TCLP compliant



BENEFITS OF MASTERCOLOR® METAL HALIDE LAMPS

- Low cost of ownership with high energy efficiency (up to 93 lumens per watt) and long life (up to 12,500 hours)
- High color rendering (up to 92 CRI) and choice of color temperatures (3000°K and 4000°K)
- Superior color maintenance ($\pm 200^{\circ}\text{K}$ at end of life)
- Low environmental impact with ALTO® TCLP compliance
- Standard metal halide ballasts and sockets
- Variety of lamp wattages, shapes, and beamspreads available



BENEFITS OF **Halogená** LAMPS

- Directly replaces standard incandescents and lasts three times longer
- Crisp, white, high-color rendering light that's dimmable
- Decorative shapes also available

