HIGH-LIGHTING ENERGY SAVINGS

Mervyns Department Store Case Study

Mervyns LLC, headquartered in the San Francisco Bay Area, is a family-friendly promotional neighborhood department store offering trend-right fashions and home décor at affordable prices. Operating 173 stores in eight states, each store averages 80,000 square feet. Seeking to make the most of this retail space, Mervyns partnered with SYLVANIA Lighting Services (SLS) to design, specify and install state-of-the-art lighting systems throughout stores, distribution centers and corporate headquarters.

Mervyns' objective was to enhance the shopping experience for its customers by improving the quality and quantity of lighting in its stores. The company wanted a lighting system that would lead the industry in demonstrating operational excellence, minimizing operating costs, improving total financial performance, creating a pleasant work environment and reducing the total environmental footprint of facilities management. Mervyns saw the opportunity to achieve a number of successes through the application of SLS lighting solutions.

Recognizing the environmental values of Mervyns' customers in the west and southwest, and growing concerns about global warming, energy self-sufficiency, and pollution prevention and corporate sustainability, the lighting retrofit would allow the Company to reduce total electrical load while decreasing greenhouse gases and related emissions.

A team of SYLVANIA commercial engineers, SLS, and Industrial Commercial professionals partnered with Mervyns' Facilities Team to create the most effective lighting system for Mervyns' store of the future. "To begin, our experts reviewed the existing lighting system in place at Mervyns, then made recommendations for a new system that would better suit the range of applications and different features within the stores," Tim Haley, commercial engineer for OSRAM SYLVANIA, said. The team collaborated with Keith Kosiba of Studio Three Twenty One, a premier lighting design firm with an expertise in energy-efficient lighting for the retail market.

The upgrade began in the fall of 2006 with more than half the stores completed to date. Developed to meet the stores' needs, an extensive design strategy will replace the vintage lighting system with current, energy-efficient technology. One-hundred and sixty-four of Mervyns' department stores will benefit from the lighting design, with execution occurring during nighttime hours to ensure minimal impact on Mervyns' business, customers and employees.

"We have developed a wide range of lighting solutions specifically designed to meet the needs of retail applications," Rob Elliott, OSRAM SYLVANIA national account manager said. "With SYLVANIA products, you can enhance store and merchandise appearance, while cutting energy consumption and reducing maintenance costs", he added.

High performance, long-life SYLVANIA FO32/XPS OCTRON® lamps and SYLVANIA QUICKTRONIC® High Efficiency QHE electronic ballasts are being installed by SYLVANIA

Lighting Services to standardize the lamp types throughout all facilities. Existing four lamp fixtures are de-lamped to save energy, while maintaining light output and distribution using new reflectors and louvers. In addition, existing fixtures are cleaned to restore reflectivity. The WattStopper, the nation's largest occupancy sensor manufacturer, has provided light control sensors, which are installed to turn lights out when areas are not in use.

"The lighting system is typically one of the largest users of electricity in a retail facility," Peter Alpert, executive major account representative, SLS, said. "When lighting operates at optimal efficiency, it uses less electricity, meaning lower energy bills. And, as Mervyns can confirm, when applied to a whole facility, the cost savings are substantial," he added.

From a financial standpoint, the initial investment of the lighting project was \$11.5 million. With an anticipated savings of \$6 million, Mervyns can expect a simple payback in less than two years. Energy savings alone of 28,995,471 kWh per year equal a projected \$4.3 million per year, while utility rebates will save an estimated \$1.2 million. As a result of new equipment and exclusive SLS lamp and ballast warranties, Mervyns will benefit from a projected annual maintenance savings of \$1.7 million. The reduced energy usage also allows Mervyns to take advantage of the Energy Policy Act of 2005 tax benefit for an estimated tax savings of more than \$2.9 million.

"Recognizing the important role we play in the community and the lives of our customers, we believe it's our responsibility to ensure we're operating as efficiently and productively as possible," Rob Lucacher, environmental and energy manager for Mervyns, said. "Thanks to the products and skills of SYLVANIA Lighting Services, we are building a lighting infrastructure that not only achieves our goals of energy-efficiency and environmental sustainability, but advances our core business goals as well," he added.

Upon completion of the project by year-end 2007, the environmental benefits expect to be substantial. The new lighting system requires 73,200 fewer lamps to light the stores, which will result in 2.2 million linear feet of fluorescent lamps kept out of landfills by recycling through SLS. Additionally, 65 million pounds of CO² and 1.8 million milligrams of airborne mercury emissions will be eliminated from power plants.

Through the sustainable and business focused lighting design provided by SYLVANIA Lighting Services, Mervyns is demonstrating its commitment to achieving environmental sustainability and business excellence at a time when it's needed most.

"Recognizing the challenge of building and managing stores for the future was a key metric for defining success with SLS," Roman Starno, Mervyns Director of Property Development and Construction, said. "The innovation, commitment and discipline they brought to the table was, and continues to be, an important component of our success."

In keeping with the success achieved through the Mervyns lighting project, Mervyns has been recognized by OSRAM SYLVANIA with a plaque honoring the company for is environmental achievements through energy-efficient lighting design.

Image Gallery:



The Kids Department of Mervyns Department Store looks dreary prior to the lighting renovations by SYLVANIA.



The new lighting scheme from SYLVANIA allowed Mervyns to improve store lighting while increasing energy savings.



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The Housewares Department looked dull and dark before SYLVANIA's lighting makeover at Mervyns.



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