

## Michelle Obama Neighborhood Library LEED Certification



### **Materials and Resources**

Smart material selections, resources, and processes can provide a visible and substantial environmental statement. During the construction of this library, over 75% of the construction debris generated was diverted, preventing it from contributing to local landfills. Construction materials and associated site work are a combination of post-industrial and post-consumer recycled materials, reducing the environmental impact of transporting these materials to the site. Rapidly renewable materials were also selected to reduce the use and depletion of finite raw materials and long-cycle renewable materials.



### **Water Efficiency**

Projects are encouraged to employ efficient water-saving strategies, therefore protecting precious natural resources. This site incorporates drought-tolerant plants that reduce the requirements of potable water for irrigation by more than 50% of the average usage of comparable buildings. Water-saving faucets, urinals, and toilets installed throughout this building have the potential to drastically reduce overall water consumption.



### **Energy and Atmosphere**

Energy savings are paramount in developing a smart sustainable design strategy. The heating, ventilation, and air conditioning (HVAC) systems and equipment within this project incorporate non-ozone depleting refrigerants. The HVAC and the lighting systems have been optimized to perform more efficiently than required by the strict California Building Code, and monitoring systems are in place to ensure that all systems are functioning properly.



### **Indoor Environmental Quality**

Indoor environmental quality addresses the human aspects of a sustainable solution. Volatile organic compounds (VOC) in adhesives, sealants, paints, and other coatings have been kept to a minimum with regard to construction, materials, and processes. This library is designed to provide occupants access to natural daylight rather than a totally artificially lit environment, resulting in reduced energy usage. In addition, this library is designed to provide a comfortable thermal environment that supports the productivity and well-being of the occupants.



### **Innovation and Design**

Design innovation provides an opportunity for a project team to develop unique and specific sustainable strategies that contribute to the overall environmental direction. Lighting fixtures selected for this library were specifically selected based on low mercury content. The narrative, which you are now reading, is part of a sustainable educational component designed to expose and teach the public about the smart environmental design strategies that formed the basis for the overall design direction.