

U.S. Embassy Antananarivo

LEED® Silver Certified



The U.S. Embassy in Antananarivo, Madagascar is the first Leadership in Energy and Environmental Design (LEED®) Certified building in Madagascar. The embassy earned the silver level of LEED under LEED for New Construction. It is the sixth U.S. Diplomatic facility to achieve this prestigious certification.

Site 9.64 Acres | Project Cost \$112 Million | Occupancy April 2010

Sustainable Sites

The embassy is located in Point Liberty. Over 50% of the embassy site is open vegetated space planted with native and adaptive species, including large canopy and medium height trees, palm trees, shrubs, ground cover and ornamental grasses.

Water Efficiency

Reduced outdoor water consumption is accomplished through meeting irrigation demand with non-potable wastewater effluent, which is treated on-site. The water used for irrigation percolates into the soils, replenishing the groundwater. The building is calculated to use 39% less water than the performance requirements of EPA Act 1992. Reduced indoor water usage is accomplished through installation of waterless urinals, automatic shut-off faucets with aerators, and low-flow plumbing fixtures.

Energy and Atmosphere

The new embassy is projected to reduce energy costs by 20% compared to the calculated baseline (ASHRAE 90.1-2004). The building's sunshades reduce solar heat gain. Additionally, the embassy employs many energy efficient technologies, including solar hot water; LED task lighting; occupancy sensors; electric traction elevators; and variable frequency drives for pumps, fans, and motors. The building managers optimize performance by utilizing an automation system that allows the building to dynamically respond to the local climate.

Materials and Resources

This facility was built using materials with high quantities of recycled content. The combined recycled content value, as a percentage of total base building materials, by cost, is over 21%. Most notably the rebar has 98% post consumer recycled content; ceiling tiles have 76% pre-consumer recycled content; gypsum wall board with 94% pre-consumer recycled content; and carpet tile made with 10% post consumer, and 25% preconsumer recycled content.

Indoor Environmental Quality

Employees and visitors will benefit from a superior indoor environment. By monitoring CO₂ levels, optimal amounts of fresh air are provided to the occupants. Outside air is filtered with HEPA and carbon filters. Low-emitting materials were selected to reduce potential off-gassing after installation. Adhesives, sealants, paints, coatings, and furniture systems all contain low quantities of volatile organic compounds.

Architect PageSoutherlandPage

Contractor B.L. Harbert International

Landscape AST Cowen Design Group

Civil Cervantes and Associates

Structural Ehlert / Bryan

MEP H&A Architects & Engineers

Commissioning KSJ Resources
