

U.S. Embassy Lusaka LEED® Silver Certified



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

Site 12.36 acres | Project Cost \$126 Million | Occupancy January 2012

Sustainable Site

The Embassy is located on Lusaka's Ibex hill. Over 50% of the site area is planted with native trees and grasses that are known to withstand the extended dry period experienced in the region. All hardscape on the site is a light-colored concrete, which reduces heat absorption and the resulting heat island effect.

Water Efficiency

The building is calculated to use 31% less water than the performance requirements of EPAct 1992. This is accomplished through the use of waterless urinals, automatic shut-off faucets, and low-flow plumbing fixtures. All wastewater generated is treated on-site. The cleansed water is reused for irrigation, and ultimately infiltrated, replenishing the groundwater.

Energy and Atmosphere

The new embassy is projected to reduce energy costs by 14.5% compared to the calculated baseline (ASHRAE 90.1-2004). The building's sunshades and light-colored stone façade 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.

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.

Materials and Resources

This facility was built using sustainable materials. Over 20% of base building materials contain recycled content, including rebar, ceiling tiles, carpet, and insulation. Over 75% of waste generated during construction was diverted from landfills and incinerators. This was largely accomplished through donations to the local population.

Green Buildings Supporting Eco-Diplomacy

Signage is provided throughout the site and general work areas inside the building to educate visitors and staff about the energy-efficient and sustainable features incorporated into the embassy's design and construction. The signage explains a wide array of green building concepts including energy-efficiency, water conservation, and sustainable attributes of the selected materials.

Architect EYP Architecture & Engineering

Contractor B.L. Harbert International

Landscape AST Cowen Design Group

Civil AST Cowen Design Group

Structural Elliot, Leboeuf & McElwain

MEP H&A Architects & Engineers

Commissioning Sebesta Blomberg

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