

AMERICAN EMBASSY SOFIA, BULGARIA

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LEED CERTIFICATION FACTS (U.S. EMBASSY)

30% reduction in energy costs

21% reduction in water use

1^o U.S. embassy to earn LEED certification

in March 2007, the U.S. embassy in Sofia became the first building in Bulgaria, and also the first U.S. embassy in the world, to earn LEED certification. It is the first to incorporate green strategies.

STRATEGIES AND RESULTS

The embassy is built just outside Sofia's central business district, on a former brownfield site easily accessible by public transportation.

There are reserved carpool spaces, bicycle racks and showers that encourage employees to use environmentally friendly modes of transportation.

The building is setback from the street and the project team set aside 4 acres of wildlife habitat, and planted 400 trees on the site.

One third of the project material was sourced from within 500 miles of the project site. Air quality is granted by:

- humidity control;
- separate ventilation for rooms with high chemical emissions;
- a carbon-dioxide monitoring system.

This project involves a sophisticated irrigation system and water-efficient fixtures which save 136,00 gallons of water.

In addition the building uses electrical pulses instead of harsh chemicals to treat its water.

There are sensors and timers to turn off lights when they are not needed and an important contribution to daylighting is made by **light shelves**.

LIGHT SHELVES

Windows receive large amounts of lights, which focus however in one point only. Shelves placed on the windows avoid the problem by directing the light towards the ceiling and the rest of the room.



PICTURES



PICTURES



SITOGRAPHY

- <https://www.usgbc.org/ShowFile.aspx?DocumentID=6210>
- http://livebuilding.queensu.ca/green_features/smart_lighting/light_shelves
- <http://diplomacy.state.gov/discoverdiplomacy/explorer/places/195756.htm>
- http://bulgaria.usembassy.gov/media_04222009.html