



State Guest House, Bodhgaya, Bihar



Location	: Bodhgaya, Bihar
Site Area	: 19,015 sq.m.
Built up Area	: 12,250 sq.m.
Typology	: Commercial
Rating Category	: GRIHA Provisional Rating
Version	: Version 2015
Year of Award	: 2025
Client	: Bhawan Nirman Vibhag
Green Building Consultant	: eNeed Integrated Services Pvt. Ltd.



The following strategies were adopted by the project team to reduce the building impact on the environment:

Sustainable Site Planning:

- Availability of amenities such as grocery store, bank, restaurant and community centre are at a walking distance from the entrance and park is located within the project.
- A total of 1,892.35 cum of topsoil was excavated and reused on-site for landscaping purposes.

Energy:

- EPI reduction of 69.78% from the GRIHA base case has been demonstrated through the integration of high-performance systems.
- Solar photovoltaic system of capacity 210 kWp has been installed.
- Solar hot water system of flat plate collector type with 5000 LPD capacity was installed in the project.

Occupant Comfort:

- More than 25% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by NBC 2005.

Water Management:

- Reduction of 53.69% from the GRIHA base case has been demonstrated in the building water demand by installing efficient low-flow fixtures.
- Reduction of 46.89% from the GRIHA base case has been demonstrated in the landscape water demand by installing efficient irrigation systems.

Sustainable Building Materials:

- Pozzolana Portland cement with 34% fly ash content were used in plaster and masonry mortar.
- AAC blocks and flyash bricks have been used for walling in the project.

Waste Management:

- Centralized waste collection facility has been provided in the project.
- Multi-colored bins have been provided for segregation of dry & wet waste.