



# Multi level Car Parking at Jail Road Puri Odisha



<b>Location</b>	: Puri, Orissa
<b>Site Area</b>	: 14,265 sq.m.
<b>Built up Area</b>	: 10,836.80 sq.m.
<b>Typology</b>	: Commercial
<b>Rating Category</b>	: GRIHA Provisional Rating
<b>Version</b>	: Version 2015
<b>Year of Award</b>	: 2024
<b>Client</b>	: Puri Konark Development Authority
<b>Principal Architect</b>	: BUILDKRAFT Engineering & Architecture
<b>Green Building Consultant</b>	: Sustainable Buildings & Habitat, Bhubaneswar

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

### Sustainable Site Planning:

- Air pollution control measures such as site barricading, wheel washing facility and water sprinkling on the unpaved roads were strictly adhered to during construction.
- 160 new trees of native species were planted within the project.

### Energy:

- EPI reduction of 50.16% from the GRIHA base case has been demonstrated through the integration of high-performance systems.
- Solar photovoltaic system of capacity 300 kWp has been installed.

### Occupant Comfort:

- 53.45% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by NBC 2005.
- Low-VOC paint, containing 32.73 g/L of volatile organic compounds and free from lead, has been utilized in the project.

### Water Management:

- Reduction of 60% from the GRIHA base case has been demonstrated in the building water demand by installing efficient low-flow fixtures.
- Reduction of 83% from the GRIHA base case has been demonstrated in the landscape water demand by installing efficient irrigation system.
- Moving Bed Biofilm Reactor (MBBR)-based STP with a capacity of 90 KLD was installed in the project.

### Sustainable Building Materials:

- Portland Slag Cement with approximately 60% slag by weight were used in the structural concrete.
- Granite, ceramic tiles and vitrified tiles were used in the project.

### Socio-Economic Strategies:

- A dedicated service room has been provided for the service staff in the project.