



NABARD Regional Office, Kolkata



Location	: Kolkata, West Bengal
Site Area	: 4,048.75 m ²
Built up Area	: 8,355 m ²
Typology	: Office Building
Rating Category	: GRIHA Provisional Rating
Version	: Version 3.1
Year of Award	: 2023
Client	: National Bank for Agriculture & Rural Development (NABARD)
Integrated Design Team	: Space Design Group
Green Building Consultant	: Agnikrida- Sustainable Building Design Solution

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

Site Planning & Construction Management:

- Provision of 3-metre-high barricading, wheel washing facility, covering of fine aggregates and impervious platform for hazardous materials at site.
- Provision of safety equipment, clean drinking water facility, clean toilets, daylit and ventilated labour hutments.
- Planning of services along the pathways into one corridor.

Energy:

- Project has achieved an EPI reduction of 40.2% through integration of high-performance systems. The base case value considered for EPI was 140 kWh/sqm/year and design case value was 83.7 kWh/sqm/year. Astronomical timer control has been provided for 100% of the outdoor lighting system.
- Solar photovoltaic system of capacity 40 kWp has been installed.

Occupant Comfort

- 76% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by SP 41.
- Noise levels of all the interior spaces are in range of 35.94 dB-39.74 dB and outdoor spaces in range of 62.10 dB, which meet the acceptable limits as defined by NBC.

Water:

- Reduction of 44.98% from the GRIHA base case of 6,787.26 KL and design case of 3,734.19 KL has been demonstrated in the building water demand by installing efficient low-flow fixtures.

Sustainable Building Materials:

- Replacement of 25% of OPC with fly ash in structural concrete and use of AAC blocks with 60% fly ash content.
- Vitriified tiles, granite, laminated wooden flooring and ceramic tiles have been used as flooring materials in the project.

Solid Waste Management:

- Dedicated space for storage of segregated waste has been provided in the project both at building and site level.