



PWD REST HOUSE, Hingoli Aurangabad division



Location	: Hingoli, Aurangabad, Maharashtra
Site Area	: 5,196 sq.m.
Built up Area	: 1,087 sq.m.
Typology	: Commercial
Rating Category	: GRIHA for Existing Buildings (EB)
Version	: 1
Date of Award	: 30 April 2019
Client	: Government of Maharashtra
Integrated Design Team	: Public Works Department (PWD) Maharashtra
Green Building Consultant	: Built Environment (India) Pvt. Ltd

GRIHA EB



4 STAR

The following strategies were adopted by the project teams to reduce the impact of the existing building on the environment:

Site Parameters:

- Amenities such as bus stop, bank, pharmacy, restaurant etc. are available within 500 meters walking distance from the main entrance of the project.
- Preferred parking provided for electric vehicles provided.
- Strategies implemented over 3291 sq.m. of site are to reduce the Urban Heat Island Effect.

Energy:

- Replacing old electrical equipment and appliances with BEE star rated ones has reduced the annual energy consumption from 68,619 kWh/year to 49,211 kWh/year.
- Solar photovoltaic system proposed of 9kWp to generate 12,600 kWh of renewable energy.

Water Efficiency:

- Project team has declared to provide a rain water harvesting system to cater for the roof water run-off on site.

Human Health and Comfort:

- Indoor comfort conditions measured in summer months; Dry bulb temperature= 32 – 34°C, Relative humidity= 29% – 35%, Daylight levels= 277 - 485 lux, Artificial lighting levels= 190 - 289 lux and Indoor noise levels: 45- 48 dB; were compliant with benchmarks of the Indian Model for Adaptive comfort, SP41.

Total energy offset
by renewables
= **25.6%**

Total reduction in
building water demand
= **21.37%**

TOTAL CARBON OFFSET BY THE PROJECT:

By planting native saplings & preserving existing trees: **0.88 ton/year**

By conservation of conventional energy: **34.85 ton/year**