



REST HOUSE, Malegaon Jahangir Amravati division

GRIHA EB



5 STAR



Location	: Malegaon Jahangir, Washim district, Maharashtra
Site Area	: 9,235 sq.m.
Built up Area	: 319 sq.m.
Typology	: Hospitality
Rating Category	: GRIHA for Existing Buildings (EB)
Version	: 1
Date of Award	: 17 May 2019
Client	: Government of Maharashtra
Integrated Design Team	: Public Works Department (PWD) Maharashtra
Green Building Consultant	: Shashwat Green Building Consultancy

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

Site Parameters:

- Trees preserved on site in the ratio of 1 tree per 80 sq.m.
- Preferred parking provided for electric vehicles
- Strategies implemented over 8,819 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 4,627 kWh/year to 3,354 kWh/year.
- Solar photovoltaic system proposed of 2 kWp to generate 3120 kWh of renewable energy.

Water Efficiency:

- Building water consumption reduced from 297.1 kiloliters/year to 205.5 kiloliters/year.
- The total sewage water generated on site is 0.6 kiloliters/day.

Human Health and Comfort:

- Indoor comfort conditions measured in summer months; Dry bulb temperature= 31 - 32°C, Relative humidity= 20% - 21%, Daylight levels= 193 - 276 lux, Artificial lighting levels= 301 - 312 lux and Indoor noise levels: 38 - 38 dB; were compliant with benchmarks of the Indian Model for Adaptive comfort, SP41 and NBC 2005.

Total energy offset
by renewables
= 93%

Total reduction in
building water demand
= 30.8%

TOTAL CARBON OFFSET BY THE PROJECT:

By planting native saplings & preserving existing trees: 2.73 ton/year

By conservation of conventional energy: 4.78 ton/year