REST HOUSE, Kannad
Aurangabad division

GRIHA EB

4 STAR

Location	: Kannad, Aurangabad district, Maharashtra
Site Area	: 589 sq.m.
Built up Area	: 322 sq.m.
Typology	: Hospitality
Rating Category	: GRIHA for Existing Buildings (EB)
Version	: 1
Date of Award	: 1 August 2019
Client	: Government of Maharashtra
Integrated Design Team	: Public Works Department (PWD) Maharashtra
Green Building Consultant	: Built Environment (India) Pvt. Ltd

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 547.63 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 5244 kWh/year to 966 kWh/year
- Solar photovoltaic system proposed of 2 kWp to generate 3126 kWh of renewable energy.

Water Efficiency:

- Building water consumption reduced from 102.3 kiloliters/year to 16.5 kiloliters/year
- The total sewage water generated on site is 0.05 kiloliters/day.

Human Health and Comfort:

- Indoor comfort conditions measured in summer months; Dry bulb temperature= 27 - 28°C, Relative humidity= 38% – 39%, Daylight levels= 182 - 195 lux, Artificial lighting levels= 201 - 255 lux and Indoor noise levels: 36 - 39 dB; were compliant with benchmarks of the Indian Model for Adaptive comfort, SP41 and NBC 2005.

Total energy offset by renewables	Total reduction in building water demand
= 323.6%	**= 84.3%**

TOTAL CARBON OFFSET BY THE PROJECT:

By planting native saplings & preserving existing trees: 0.22 ton/year

By conservation of conventional energy: 8.06 ton/year