# REST HOUSE, Vengurla
# Konkan Division

GRIHA EB

4 STAR

| | |
|---|---|
| **Location** | : Vengurla, Sindhudurg district, Maharashtra |
| **Site Area** | : 1273 sq.m. |
| **Built up Area** | : 3192 sq.m. |
| **Typology** | : Hospitality |
| **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 |

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

**Site Parameters:**

- Amenities such as bus stop, bank, pharmacy, restaurant etc. were available within 500 meters of walking distance from the main entrance of the project.
- Trees were preserved on site in the ratio of 1 tree per 80 sq.m.
- Strategies such as soft landscape area with vegetation, green roof, solar panels and china mosaic were implemented over 473 sq.m. of site area 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 7852 kWh/year to 197 kWh/year.
- Solar photovoltaic system proposed of 1 kWp to generate 1564 kWh of renewable energy.

**Water Efficiency:**

- The total sewage water generated on site is 3.65 kiloliters/day.

**Human Health and Comfort:**

- Indoor comfort conditions measured in summer months;
  Dry bulb temperature= 29 - 31°C, Relative humidity= 66% – 73%,
  Daylight levels= 270 - 347 lux, Artificial lighting levels= 170 - 206 lux; were compliant with benchmarks of the Indian Model for Adaptive comfort, SP-41 and NBC 2005.

| Total energy offset by renewables | Total conventional energy saved at source |
|---|---|
| **= 793.9%** | **= 11155** kWh/year |

**TOTAL CARBON OFFSET BY THE PROJECT:**

**By planting native saplings & preserving existing trees: 0.35 ton/year**

**By conservation of conventional energy: 10.04 ton/year**