PW SUB DIVISION No. 5, Amravati
Amravati division

GRIHA EB

3 STAR

Location	: Amravati district, Maharashtra
Site Area	: 405.03 sq.m.
Built up Area	: 235 sq.m.
Typology	: Commercial
Rating Category	: GRIHA for Existing Buildings (EB)
Version	: 1
Date of Award	: 12 June 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:

- Availability of amenities such as bus stop, bank, pharmacy, restaurant and grocery store within 500 meters walking distance from the main entrance of the project.
- Preferred parking provided for electric vehicles
- Strategies implemented over 54.17 sq.m. of site area to reduce the Urban Heat Island Effect.

Energy:

- Solar photovoltaic system proposed of 1 kWp to generate 1530 kWh of renewable energy.

Water Efficiency:

- Building water consumption reduced from 69.2 kiloliters/year to 42.3 kiloliters/year
- The total sewage water generated on site is 0.158 kiloliters/day.

Human Health and Comfort:

- Indoor comfort conditions measured in summer months; Dry bulb temperature= 29 - 30°C, Relative humidity= 46% – 49%, Daylight levels= 366 - 389 lux and Indoor noise levels: 34 - 38 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
= 166.7%	**= 38.9%**

TOTAL CARBON OFFSET BY THE PROJECT:

By planting native saplings & preserving existing trees: 0.08 ton/year

By conservation of conventional energy: 1.66 ton/year