



NEW COLLECTOR OFFICE, Osmanabad Aurangabad division



Location	: Osmanabad, Aurangabad district, Maharashtra
Site Area	: 6,130 sq.m.
Built up Area	: 1,204 sq.m.
Typology	: Commercial
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

GRIHA EB



3 STAR

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, community center and grocery store within 500 meters walking distance from the main entrance of the project.
- Strategies implemented over 3,392 sq.m. of site area to reduce the Urban Heat Island Effect.

Energy:

- Energy efficiency measures like replacing the old lighting fixtures with LEDs, installation of efficient fans has reduced the annual energy consumption from 28,187 kWh/year to 26,274 kWh/year.
- Solar photovoltaic system proposed of 11 kWp to generate 17,053 kWh of renewable energy.

Water Efficiency:

- The total sewage water generated on site is 6.48 kiloliters/day.

Human Health and Comfort:

- Indoor comfort conditions measured in summer months; Dry bulb temperature= 28 - 29°C, Relative humidity= 24% – 28%, Daylight levels= 160 - 205 lux, Artificial lighting levels= 300 - 314 lux and Indoor noise levels: 38 - 40 dB; were compliant with benchmarks of the Indian Model for Adaptive comfort, SP41 and NBC 2005.

Total energy offset
by renewables
= 64.9%

Total reduction in
building water demand
= 21%

TOTAL CARBON OFFSET BY THE PROJECT:

By planting native saplings & preserving existing trees: 1.05 ton/year

By conservation of conventional energy: 20.6 ton/year