



# RURAL HOSPITAL, Renapur Aurangabad Division



<b>Location</b>	: Renapur, Latur district, Maharashtra
<b>Site Area</b>	: 4000 sq.m.
<b>Built up Area</b>	: 836 sq.m.
<b>Typology</b>	: Hospital
<b>Rating Category</b>	: GRIHA for Existing Buildings (EB)
<b>Version</b>	: 1
<b>Date of Award</b>	: 31 March 2019
<b>Client</b>	: Government of Maharashtra
<b>Integrated Design Team</b>	: Public Works Department (PWD) Maharashtra
<b>Green Building Consultant</b>	: 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:

- Trees preserved on site in the ratio of 1 tree per 80 sq.m.
- Preferred parking provided for electric vehicles.
- Strategies such as soft landscape, hard paved area with vegetation, green roof, solar panels and china mosaic were implemented over 8241 sq.m. of site area to reduce the Urban Heat Island Effect.

#### Energy:

- Solar hot water system installed of 2000 liters to generate 25,000 kWh of renewable energy.

#### Water Efficiency:

- Rainwater harvesting system for roof water run-off on site has been provided.
- The total sewage water generated on site is 0.60 kiloliters/day.

#### Human Health and Comfort:

- Indoor comfort conditions measured in summer months; Dry bulb temperature= 37 - 24°C, Relative humidity= 38% - 32%, Daylight levels=168 - 300 lux, Artificial lighting levels= 170 - 253 lux and Indoor noise levels: 38 - 40 dB; were compliant with benchmarks of the Indian model for Adaptive comfort, SP-41 and NBC 2005.

#### Social Aspects:

- Provision of ramps at entrance and parking space for differently abled people.

Total energy offset  
by renewables  
= **133.19%**

Total reduction in  
building water demand  
= **37.77%**

### TOTAL CARBON OFFSET BY THE PROJECT:

**By planting native saplings & preserving existing trees: 1.10 ton/year**  
**By conservation of conventional energy: 25.58 ton/year**