



RURAL HOSPITAL, Shetphal Pune Division



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| Location | : Shetphal, Solapur District, Maharashtra |
| Site Area | : 6,130 sq.m. |
| Built up Area | : 1,040 sq.m. |
| Typology | : Healthcare |
| Rating Category | : GRIHA for Existing Buildings (EB) |
| Version | : 1 |
| Date of Award | : 30th April, 2019 |
| Client | : Government of Maharashtra |
| Integrated Design Team | : Public Works Department (PWD), Maharashtra |
| Green Building Consultant | : Gadin Consultancy & Co. |

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

Site Parameters:

- Preferred parking was provided for electric vehicles .
- Strategies were implemented over 3,190 sq.m. of site area to reduce the Urban Heat Island Effect.

Energy:

- Replacement of old lighting fixtures with LEDs, installation of efficient fans have reduced the annual energy consumption from 8,666 kWh/year to 535 kWh/year demonstrating a reduction of 93.82% from the total energy consumption.
- Solar photovoltaic system of 2 kWp was proposed to generate 3,124 kWh of renewable energy.

Water Efficiency:

- Building water consumption was reduced from 776.35 kiloliters/year to 501.51 kiloliters/year demonstrating a reduction of 35.4% from the total water consumption.

Human Health and Comfort:

- Daylight levels are within the range of 313 – 914 lux and are in compliant with benchmarks of SP41.

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| Total energy offset by renewables = 583.9% | Total reduction in building water demand = 35.4% |
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TOTAL CARBON OFFSET BY THE PROJECT:
By planting native saplings & preserving existing trees: 0.33 ton/year
By conservation of conventional energy: 12.26 ton/year