



Hospital, Medical & Nursing College, Ayush and Auditorium Buildings at AIIMS, Gorakhpur, Uttar Pradesh



Location	: Gorakhpur, Uttar Pradesh
Site Area	: 1,56,506.38 m ²
Built up Area	: 81,353 m ²
Typology	: Hospital building
Rating Category	: GRIHA Provisional Rating
Version	: Version 2015
Year of Award	: 2023
Client	: MoHFW, Government of India
Integrated Design Team	: J.Anandan, L&T Construction
Green Building Consultant	: Dr.S.Rajkumar, L&T Construction

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

Sustainable Site Planning:

- Air pollution control measures such as site barricading, wheel washing facility and covering of loose construction material were strictly adhered to during construction.
- All 21 existing trees were preserved and 1,166 new native trees were planted.

Energy:

- 34% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by NBC 2005.
- EPI reduction of 51.18% from the GRIHA base case has been demonstrated through the integration of high performance systems.

Water Management:

- Reduction of 56.11% from the GRIHA base case has been demonstrated in the building water demand by installing efficient low-flow fixtures.
- Reduction of 75.45% from the GRIHA base case has been demonstrated in the landscape water demand by installing micro drip irrigation systems.
- Gunny bags were used for curing of columns and ponding technique was used for curing of slabs.

Renewable Energy Technology installed on site:

- Solar photovoltaic system of capacity 100 kWp has been installed.
- Solar hot water system of capacity 22,800 LPD has been installed.

Sustainable Building Materials:

- Flyash bricks have been used for walling in the project.
- Gypsum boards, metal tiles, and mineral fiber boards have been used as false ceiling materials.
- 100% of paints, adhesives and sealants are low VOC.

Waste Management:

- Multi-colored bins have been provided for segregation of waste at each floor in the buildings.
- Membrane bioreactor (MBR) type STP of 500 KLD capacity has been installed on site.