



# Construction for up-gradation of SN Medical College, Agra (Uttar Pradesh) under PMSSY (Phase-IV)



<b>Location</b>	: Agra, Uttar Pradesh
<b>Site Area</b>	: 7,980 sq.m.
<b>Built up Area</b>	: 13,688.7 sq.m.
<b>Typology</b>	: Institutional
<b>Rating Category</b>	: GRIHA Provisional Rating
<b>Version</b>	: Version 2015
<b>Year of Award</b>	: 2025
<b>Client</b>	: Principal, Sarojini Naidu Medical College, Agra
<b>GreenBuilding Consultant</b>	: Greengineer Private Limited

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

#### **Sustainable Site Planning:**

- Availability of amenities such as pharmacy, ATM, canteen, religious centre, grocery store are located within the project.
- A total 29% reduction in Urban Heat Island Effect (UHIE) was achieved by implementing high SRI tiles on terrace area.

#### **Energy:**

- EPI reduction of 69% from the GRIHA base case has been demonstrated through the integration of high-performance systems.
- Solar photovoltaicsystem of capacity 30 kWp has been installed.
- Solar hot water system of with 7000 LPD capacity was installed in the project.

#### **Occupant Comfort:**

- More than 25% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by NBC 2005.

#### **Water Management:**

- Reduction of 70% from the GRIHA base case has been demonstrated in the buildingwater demand by installingefficient low-flow fixtures.
- Reduction of 54.06% from the GRIHA base case has been demonstrated in the landscape water demand by installing efficient irrigation systems.

#### **Sustainable Building Materials:**

- Pozzolana Portland cement with more than 34% fly ash content were used in plaster and masonry mortar.
- Fly ash bricks with 52% fly ash content have been used for walling in the project.

#### **Waste Management:**

- Centralized waste collection facility has been provided in the project.
- Multi-colored bins have been provided for segregation of dry & wet waste.