

## Boys Hostel at P.G. College, Agastmuni

Location : Dist. Rudraprayag, Uttarakhand

Site Area : 1,266.67 m²

Built-up Area : 1,622.41 m²

Typology : Hostel building

SVAGRIHA Rating : 4 Star Rating

Year of Completion : 2019

The following strategies were adopted to reduce the building impact on the natural environment:

### (\*) Landscape:

- More than 50% of the total paved area on site is either soft paved or shaded by trees to reduce the urban heat island effect.
- 20 new native trees have been planted on site.

## Architecture & Energy:

- · More than 79.74% of the total living area is day-lit.
- LPD of the project is 3.13 W/m2, which is lower than the ECBC specified limit of 10.80 W/ m2 for hostel buildings.
- Thermal efficiency of the building envelope is 84.81 sqft/TR.
- 60 fans are installed in the buildings which are BEE 5-star rated.

#### Water and Waste:

- Reduction of 44.25% from the SVAGRIHA base case has been demonstrated in the landscape water demand.
- · Compost pits were provided on site for treating the organic waste generated on site.

# Sustainable Building Materials:

- PPC has been used for 100% structural, plaster and masonry work.
- · Low VOC and lead free paints have been used to maintain good indoor air quality.
- Reduction of 43.88% from the SVAGRIHA base case has been demonstrated in embodied energy by using low energy materials for wall construction.

# Lifestyle:

- A dedicated toilet and resting area has been provided for service staff in the building.
- Basic amenities such as grocery store, ATM, park, restaurant, community centre, place of worship, school and pharmacy were located within walkable distance from the site.

# **Integrated Design Team:**

Client : Mr. S. A. Murugesan, Program Manager, PIU (PB) UDRP
Principal Architect : Ar. Arvind Gupta, Studio Green Consultants Pvt. Ltd.

Project Management & : Er. Ramesh Chandra Joshi,
Structural Design Consultant Technical Consultancy Services