POLITE PRECISA

Location : Pune, Maharashtra
Site Area : 2,239.25 m²
Built-up Area : 5,995.77 m²
Typology : Residential building
Energy Consumption Reduction : 55.82% reduction in Energy Consumption compared to GRIHA benchmark
EPI : 44.18 kWh/m²/year
GRIHA Provisional Rating : 4 Star Rating (Version: 3.1)
Year of Completion : 2021

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

❖ Sustainable Site Planning:
• Air pollution control measures such as site barricading, wheel washing facility and other appropriate measures were strictly adhered to during construction.
• 85.19 cum top soil was preserved on site and reused for landscaping.
• Buffer spaces were created on 66.76% of unfavorable orientation façade.

❖ Water Management:
• Reduction of 46.95% from the GRIHA base case has been demonstrated in the building water demand by installing efficient low-flow fixtures.
• Reduction of 31.05% from the GRIHA base case has been demonstrated in the landscape water demand by installing efficient irrigation systems.
• Gunny bags were used for curing of columns.

❖ Energy Optimization and Occupant Comfort:
• For achieving visual comfort:
  » 76% of the regularly occupied spaces are day-lit and meet the daylight factor as prescribed by NBC 2005.
  » Automatic timer-based controls have been provided for 100% of the outdoor lighting system.

• For achieving thermal comfort:
  » EPI reduction of 85.82% from the GRIHA base case has been demonstrated through the integration of high performance systems.

❖ Renewable Energy Technology installed on site:
• Solar photovoltaic system of capacity 4 kWp has been installed.

❖ Sustainable Building Materials:
• AAC blocks have been used for walling in the project.
• Kota stone, vitrified tiles, rubber tiles and ceramic tiles flooring have been used as flooring materials in the project.

❖ Waste Management:
• Separate garbage chutes were provided on each floor for dry and wet waste segregation.
• Central waste collection area has been provided for storage of segregated waste on site.

Integrated Design Team:
Client : Polite Precisa, Ravet
Principal Architect : Vishal Bafna & Onkar Vedpathak
Landscape Architect : Manthan Architects
Structural Consultant : Ravindra A Karnavat
Electrical Consultant : Mep System Solutions Private Limited