



S P Infocity

Location	: Manesar, Haryana
Site Area	: 29000 m ²
Built up Area	: 54172 m ²
Air-conditioned Area	: 27992 m ²
Non Air- conditioned Area	: 26180 m ²
Energy Consumption Reduction	: 45 % reduction from GRIHA benchmark
EPI	: 156 KWh/ m ² /year
Renewable energy installed on site	: 24 KW
GRIHA rating	: 3 Stars

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

- 🌍 Sustainable Site Planning:
 - Top soil stored and preserved for later use.
 - Existing trees preserved and protected on site.
 - Dust screens provided around construction area to prevent air pollution.
 - Utility corridors designed along roads and pathways on site.
- 🌍 Reduction in water consumption (compared to GRIHA benchmark):
 - 50 % reduction in building water consumption by use of low-flow fixtures.
 - Reduction in water consumption during construction.
 - 75% water recycled and reused within the complex.
 - 50 % reduction in landscape water consumption by planting native species of trees and shrubs and by using efficient irrigation systems.
- 🌍 Reduction in energy consumption (compared to GRIHA benchmark) while maintaining occupant comfort:
 - For achieving visual comfort
 - Window wall ratio (WWR) limited to 31% for optimal day lighting in the internal spaces.
 - ECBC compliant energy efficient artificial lighting design.
 - For achieving thermal comfort
 - ECBC compliant energy efficient variable speed centrifugal chillers of rated capacity 800 TR installed in the building.
 - Dimmers and occupancy sensors installed to reduce the energy consumption.
- 🌍 Renewable energy technologies installed on site:
 - Installed capacity of solar energy to meet space conditioning and internal artificial lighting loads: 24 KW.
 - Installed capacity of solar energy to meet outdoor lighting loads: 5 KW.
 - 120 units of electricity are generated per day from 24kWp of solar PV.
- 🌍 Use of low-energy/green materials:
 - 30 % OPC by weight replaced with fly-ash in structural concrete.
 - Fly ash blocks used in block work for better insulation.
 - 30% OPC replaced by fly ash for masonry and plaster mortar.

Integrated Team:

Project Management	: Skyscape Developers Pvt. Ltd
Architect	: Spazzio Architect Pvt. Ltd
Landscape Consultant	: S. Bose Landscape Consultant
Mechanical /Electrical /Plumbing Consultant	: Enersave
Green Building Design and Energy Consultant	: The Energy and Resources Institute