Software Technology Parks of India - Incubation and Data Centre, Mohali

Location	:	Mohali, Punjab
Site Area	:	4,153.10 m²
Built-up Area	:	10,699.68 m²
Air-Conditioned Area	:	8,084.48 m²
Non-Air-Conditioned Area	:	2,615.20 m²
Typology	:	Office Building
Energy Consumption Reduction	:	50.72% reduction in energy consumption compared to GRIHA benchmark
EPI	:	147.83 kWh/m²/year
Renewable Energy	:	Rated capacity of solar PV installed on site is 60 kWp
GRIHA Provisional Rating	:	5 Star Rating (Version 2015)
Year of Completion	:	2017

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

⊕ Sustainable Site Planning:
- All the existing 20 trees were cut and 60 new native trees were planted.
- Barricading of site was done to prevent air pollution.

⊕ Water Management:
- Reduction of 72.67% from the GRIHA base case has been demonstrated in building water demand by installing water efficient fixtures.
- Reduction of 65.51% from the GRIHA base case has been demonstrated in the landscape water demand.
- Gunny bags/hessian cloth was used for curing of columns and ponding technique was used for curing the slabs.

⊕ Energy Optimization
- For achieving visual comfort:
  » 75.72% of total living area is day-lit and meets the daylight factor as prescribed by NBC 2005.
- For achieving thermal comfort:
  » EPI reduction of 50.72% from the GRIHA base case has been demonstrated through the integration of high performance systems.

⊕ Renewable Energy Technology installed on site:
- 60 kWp solar photovoltaic system has been installed on site, which would be able to generate 88,025 kWh/annum.

⊕ Sustainable Building Materials:
- Sustainable materials such as mineral fiber, gypsum boards for false ceiling; MDF board for paneling; vitrified tiles and granite for flooring have been used.
- Reduction of 21.56% from the GRIHA base case has been achieved in combined embodied energy of load-bearing structure and masonry walls by using AAC blocks for masonry work.

Integrated Design Team:

Client	:	Software technology parks of INDIA
Principal Architect	:	Planners Group
Landscape Architect	:	Planners Group
Structural Consultant	:	M/s Design Accredits
Electrical Consultant	:	M/s Sunil Nayyar Consultants Pvt. Ltd
Green Building Design and Certification	:	Energetic Consulting Pvt. Ltd