

Neelkanth Corporate Park

Location : Vidyavihar (W). Mumbai

Site Area : 12119 sq.m.

Built up area : 24246 sq.m.

Air-conditioned Area : 19,639 sq.m.

Non Air-conditioned Area : 4,607 sq.m.

Energy Consumption Reduction : 27% reduction in energy consumption compared to

GRIHA benchmark
EPI : 102 KWh/ m2/year

Renewable Energy : Rated capacity of solar PV installed on site is 40kWp

GRIHA provisional rating : 2 Stars Year of completion : 2014

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

Sustainable Site Planning

- The project has been located within the walking distance of Vidyavihar Bus Depot and Railway Station.
- Sustainable site planning has been integrated to maintain favourable microclimate. The architectural
 design has been optimized as per climate and sun path analysis. Passive design strategies help in
 ensuring that visual and thermal comfort is maintained within the building with minimum interventions
 of technologies. The orientation of the office is such that it is self-shaded; the majority of
 building
 facades doesn't get exposed to direct solar heat gain.
- Most of the existing trees are preserved & protected and additionally more than 100 new trees are planted.
- Parking area below podium gets illuminated through natural tubular daylighting system which brings in natural sunlight indoors and eliminates the use of artificial light during daytime.

Reducing water consumption

(WWR) less than 32%.

- There is a provision of rain water harvesting, all the run-off from terrace and surfaces to be collected
 and used for ground recharge
- 100% of the water gets recycled through 120 Kld of sewage treatment plant (STP)
- The water consumption in the building has been reduced by more than 50% through the use of efficient low-flow fixtures, dual flush toilets etc.

Reducing energy consumption (compared to GRIHA benchmarks) while maintaining occupant comfort

- The Energy Conservation Building Code (ECBC) compliant building envelope with a window wall ratio
- The building has an ECBC compliant Low-e double glazing façade and a high performing sun control
 films with an effective solar heat gain coefficient (SHGC) of 0.17, which substantially reduces heat gain
 compared to conventional office building.
- High efficiency luminaries installed in the lift lobby, common areas respectively have brought down the energy consumption levels.
- The outdoor lighting is on automatic control and has very high luminous efficacy.
- ECBC compliant motors, transformers and pumps have been installed in the building

Renewable energy technologies installed on site

- To reduce the use of conventional/fossil-fuel based energy resources the project has installed 40kWp of solar photovoltaic on the roof top of the building.
- The solar power plant caters to more than 10% of internal and external lighting load.

Integrated Design Team:

Client : Neelkanth Developers Pvt. Ltd.
Project Coordinator : Mr. Dharmesh K Upadhyay
Principal Architect : Sandeep Shikre & Associates
Landscape Architect : Sandeep Shikre & Associates

Structural Consultant : Sterling Engineering consultancy Services Pvt Ltd.

Electrical Consultant : John Mech - El Technologies (p) Ltd.

Green Building Design and Certification : EnerArch