



## Aishwaryam Courtyard, Phase 1

<b>Location</b>	: Chikhali, Pune
<b>Site area</b>	: 25,082.8 m <sup>2</sup>
<b>Built-up area</b>	: 20,085.8 m <sup>2</sup>
<b>Air-conditioned area</b>	: 5,536.4 m <sup>2</sup>
<b>Non Air-conditioned area</b>	: 13,275.5 m <sup>2</sup>
<b>EPI</b>	: 50 KWh/m <sup>2</sup> /year
<b>Energy consumption reduction</b>	: 62% reduction compared to GRIHA benchmark
<b>Renewable Energy</b>	: Rated capacity of solar PV installed on site is 13 KW
<b>GRIHA provisional rating</b>	: 2 Stars
<b>Year of completion</b>	: April 2013

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

- 📍 **Sustainable Site Planning:**
  - The project is located within 0.5 km distance from Newale Vasti bus stop
  - Utility corridors have been designed along roads and pathways on site
  - Site was deprived of mature trees. 101 native trees have been planted to minimize impact on environment.
- 📍 **Reducing water consumption:**
  - Reduction in building water demand by 30% against GRIHA benchmark using low-flow fixtures
  - Reduction in landscape water demand by 37% against GRIHA benchmark using less lawn area and more native trees
  - 17 recharge pits with grease traps have been provided to prevent the contamination of ground water by oil and grease mixed with surface run-off
- 📍 **Reducing energy consumption (compared to GRIHA benchmarks) while maintaining occupant comfort:**
  - 62% EPI reduction compared to GRIHA benchmark (Parking and equipment loads have not been included for EPI calculation).
  - Natural lighting has been used for visual comfort. 77% of total living area is day-lit and meet daylight factor as prescribed by National Building Code (NBC).
  - ECBC compliant motors, transformers and pumps have been installed in the project
- 📍 **Renewable energy technologies installed on site:**
  - Installation of 13 KWp solar photovoltaic system in the project which meets 19% of total internal lighting energy requirement
  - 100% of hot water demand being met through solar hot water panels.
- 📍 **Use of low energy materials:**
  - Flyash bricks were used for improving concrete performance.
  - Installation of aluminum window frames for doors/window
  - PPC with a content of more than 30% flyash has been used for structural, plastering and mortar

### Integrated Design Team:

Client	: Mr. Satish Agarwal
Organization	: Sai Essen Properties
Project Coordinator	: Niraj Sanklecha
Principal Architect	: Mr. Vikas Achalkar
Landscape Architect	: Mahesh Chinchalakar
Project Management Consultant	: Niraj Sanklecha
Structural Consultant	: Mr Parag Chopda
Electrical Consultant	: Mr. Shailendra Zopate
Plumbing consultant	: Mr. Pushkaraj
Green Building Design and Certification	: Ar. Anshul Gujrathi