



## CASE STUDY: GURGAON GATEWAY



### KEY PARAMETERS

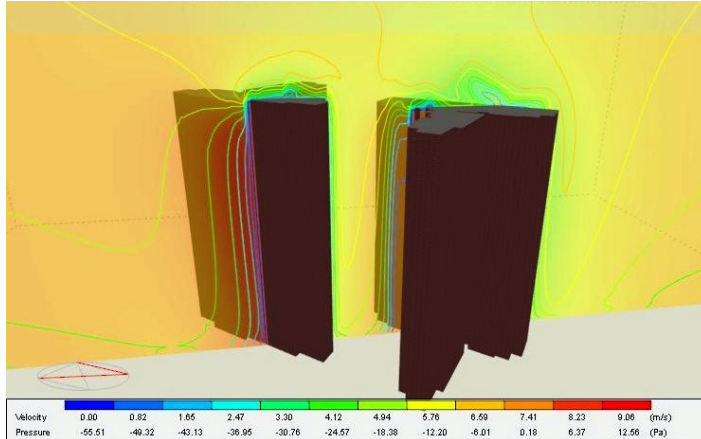
<b>Occupancy Type</b>	Homes
<b>Completed</b>	April 2013
<b>Location</b>	Gurgaon
<b>Green consultant</b>	En3 Sustainability Solutions
<b>Rating System</b>	IGBC Green Homes
<b>Rating Achieved</b>	Precertified - Gold

Gurgaon Gateway is a residential development comprising of apartments and villas in Sector 113 of Gurgaon. This development has been Precertified Gold under IGBC Green Homes Rating System. The project is always striving to protect the environment and has taken enormous efforts along with En3 to implement various sustainability and green measures within its interior space.



### SITE SUSTAINABILITY FEATURES

- The project is in ideal location with close proximity to public transportation thereby minimizing transportation pollution and strain on local infrastructure, protects green-field site and preserve habitat and natural resources.
- A detailed CFD analysis was also done to ascertain the prevailing wind patterns to locate the buildings in such a manner to as to promote maximum cross ventilation and avoid areas/zones of high wind velocities that may make it uncomfortable for pedestrians.



- Site disturbance shall be minimized by retaining natural topography or by vegetated spaces for at least 15% of site area.
- 54.76% of the non roof areas in the site will be shaded by tree cover within 5years
- 85% of the net exposed roof area (i.e. 8705.5 sq m) shall be covered with high reflective materials
- The project has provided parking capacity as per the local bye-law and additional 10% parking over & above the local code is provided for visitors.
- The project intends to provide battery charging points for 5.51% of the total car parks in an effort to reduce emissions from conventional fuels
- The project is implementing features for the differently abled like preferred parking spaces, Braille facility in lifts, toilets in common areas and ramps at suitable locations.
- The project will prepare descriptive guideline for the occupants of the project which would include a brief on sustainable design, construction and operational features of the building. The project team has provided a list items (i.e. green features implemented, do's & don'ts, etc.,) which will be included in the guidelines.

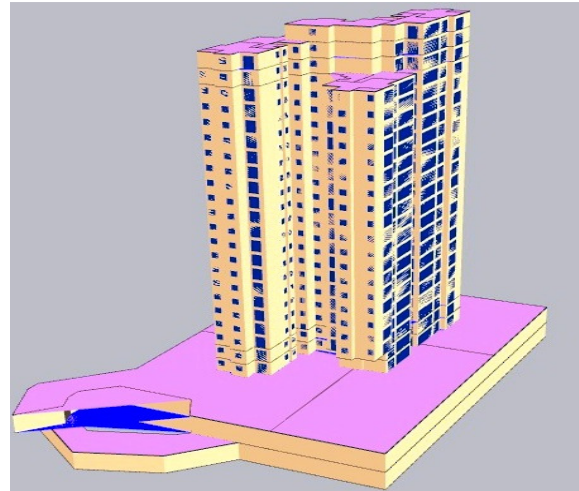
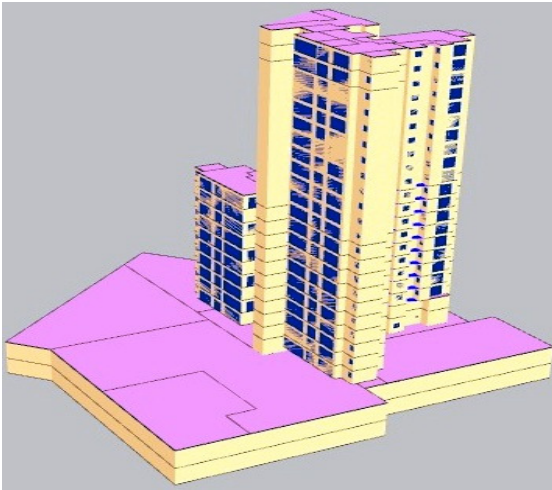
### WATER EFFICIENCY

- Water plays an integral part in the greening process of Primanti Homes. The project will harvest 90% of the rainwater runoff from roof by providing a rain water harvesting system, the designed capacity of which is 791 cu m. through storage tank provision.
- The total vegetative turf area is 37.3% (less than 40% )and the total area planted with drought tolerant is 25.4%.(more than 20%)
- The project has provided two STP of capacity 440 and 340 kLD (780,000 liters per day, efficiency of 80%).The STP proposed for the project is extended aeration technology
- 100% of treated grey water will be used for landscaping purposes.
- The project will install water meters will be installed for measuring treated grey water consumption, landscape water consumption, municipal and bore well water consumption.
- The project has reduced potable water use by 57.6% from the calculated baseline design fixture performance requirements established by the Energy Policy Act of 2005 through the installation of low flow urinals, showers, kitchen faucets, flush water closets



## *ENERGISING THE BUILDING*

- Project has considered a holistic energy efficiency approach to include the building orientation, envelope, systems, lighting & automatic controls
- Selection of CFC free and HCFC free refrigerants avoids global warming and ozone depletion.
- The project intends to install energy meters for external lights, municipal water pumping, and water pumping for landscaping.
- The project intends to install solar hot water system to meet 50% of the hot water requirements of the project.



## *RESOURCE MANAGEMENT*

- The project has intends to divert 95% of the on-site generated construction waste from landfill.
- The project intends to install 8 organic waste converter units to treat 100% of the organic waste generated from the homes.
- The project intends to source materials with recycled content such that the recycled content constitutes to at least 21.7% of total materials cost.
- The project will source local materials such that at least 95% of the total material value is manufactured within a distance of 500 km from the project site.
- The project will use Forest department certified wood for at least 100% of the new wood requirement

## *INDOOR ENVIRONMENTAL QUALITY*

- In order to support enhanced IAQ and long-term well-being of all occupants, the project will provide 30% more openable area than the baseline standard.
- Smoking will be banned in common areas of the apartment thereby ensuring the health and safety of all its occupants.
- Exhaust systems will be provided in the kitchen & Toilets to meet the minimum airflow requirement.
- Adhesives, paints, carpets and composite wood products with a low VOC content have been used to enhance the indoor environment for all home owners.
- 75% of regularly occupied spaces will have daylighting.
- Building flushout will be carried out for ten days by keeping all the windows open, after associated works on paints & coatings, adhesives & sealants have been completed.

En3 would be glad to answer any queries or questions you have on any green or sustainability related topics. Feel free to contact us at [info@en3online.com](mailto:info@en3online.com) and for more information visit us at [www.en3online.com](http://www.en3online.com).