# CASE STUDY: AQUILA HEIGHTS


**KEY PARAMETERS**

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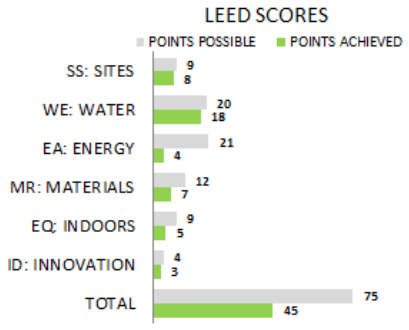
| **Occupancy Type** | Homes |
| **Completed** | April 2012 |
| **Location** | Bangalore |
| **Green consultant** | En3 Sustainability Solutions |
| **Rating System** | IGBC Green Homes |
| **Rating Achieved** | Gold |




Aquila Heights is more than just another residential complex. It's a whole new way of life. With the 3 Towers enveloped by a sprawling carefully designed campus that offers its residents something new to do. This development has been Certified 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.
- Site disturbance has been minimized by retaining natural topography or by vegetated spaces for at least 22% of site area.
- 76% of the roof areas in the site are covered with high reflective material to minimize heat island effect
- 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 has provided battery charging points for 4% of the total car parks in an effort to reduce emissions from conventional fuels
- The project has implemented features for the differently abled like preferred parking spaces, Braille facility in lifts, toilets in common areas and ramps at suitable locations.
- The project has prepared 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 79% 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 20% and the total area planted with drought tolerant is 79%.
- The project has provided STP of capacity 230 to treat 100% wastewater generated at site.
- 100% of treated grey water will be used for landscaping purposes.
- The project has installed 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 30% 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 has installed energy meters for external lights, municipal water pumping, and water pumping for landscaping.

## RESOURCE MANAGEMENT

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- The project has diverted 75% of the on-site generated construction waste from landfill.
- The project intends to source materials with recycled content such that the recycled content constitutes to at least 10% of total materials cost.
- The project will source local materials such that at least 75% 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 has adequate daylighting.
- Building flush-out was carried out for ten days by keeping all the windows open, after associated works on paints & coatings, adhesives & sealants have been completed.
- Project has been using only eco-friendly house-keeping chemicals

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 and for more information visit us at www.en3online.com.