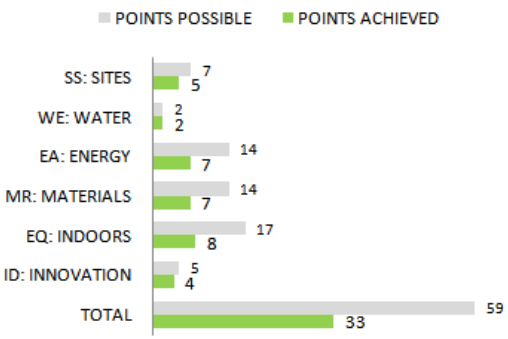
CASE STUDY: ABN AMRO BANK - KRM TOWERS

KEY PARAMETERS

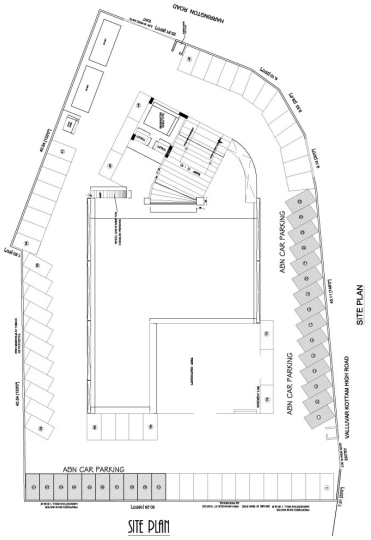
Occupancy Type	Banking office space with amenities like mechanical and electrical room, cafeteria etc.,
Built up area	50120 Sq. ft
Completed	November, 2009
Location	Chetpat, Chennai
Owner	ABN AMRO BANK
Green consultant	En3 Sustainability Solutions
Rating System	LEED USGBC ID+C version 2.0
Rating Achieved	Gold

LEED SCORES



The proposed ABN Amro occupies G+4 floors of KRM Towers, Chennai is an environmentally responsible organization and are always striving to protect the environment. En3 helps the ABN AMRO facility at KRM Towers has achieved the prestigious LEED-CI Gold rating from the United States Green Building Council. The facility incorporates several water and energy efficiency measures and provides a superior indoor environment for the occupants. The certification acknowledges ABN AMRO's continuing efforts in environmental conservation.

SITE SUSTAINABILITY FEATURES



- The project is in ideal location with close proximity to public transportation and sufficient transportation management plan for their staffs thereby minimizing transportation pollution and strain on local infrastructure
- Provision of battery charging stations for **3.5 %** of the total car parking capacity and in an effort to promote use of alternative and low emitting vehicles and to reduce transportation pollution.
- Provision of carpooling spaces for **5%** of the total car parking capacity within the premises in an effort to promote and ride sharing to reduce transportation pollution as well as strain on the local infrastructure.
- The project also has planned for almost **56.52%** of its car parks in the basement to reduce the local heat island effect.

WATER EFFICIENCY

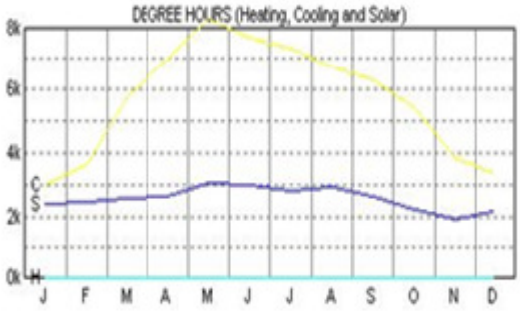
- Water plays an integral part in the greening process of the ABN-AMRO KRM TOWERS.
- Special efforts have been taken to minimize water use by installing water efficient fixtures.
- Low flow dual-flush toilets, sensor based urinals and other low flow fixtures have been selected to install at site to reduce water consumption by over 31.89 **%.**

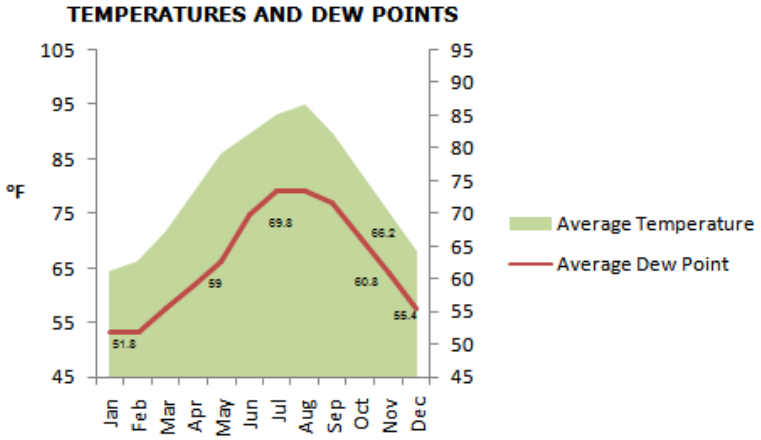
ENERGISING THE BUILDING

- Energy efficiency measures such as efficient lighting design, efficient HVAC design and AHU's with VFD are proposed and thereby energy savings is more than the conventional building system.
- Selection of CFC free refrigerants thereby avoids global warming and ozone depletion.
- The project has achieved a 27.86% reduction in connected lighting power density over that allowed by ASHRAE/IESNA Standard 90.1-2004.
- Every effort has been made in the project to identify, procure and use only Energy Star rated equipment. Hence the project has achieved 100% of ENERGY STAR Rated Power for equipment and appliances.
- Providing metering equipments for monitoring the energy use in the building from EB and DG energy monitoring, for the ongoing accountability and optimization of building energy and water consumption performance over time.

NAME: Chennai-Madras
LOCATION: IND
DESIGN SKY: not available
ALTITUDE: 16.0m

LATITUDE: 13.0"
LONGITUDE: 80.2"
TIME ZONE: +5.5hrs





RESOURCE MANAGEMENT

- To encourage choices that will conserve resources, reduce waste and reduce the environmental impacts of tenancy as they relate to materials, manufacturing and transport the project has signed a lease for at least 10 years.
- The project has achieved a combined recyclable content value of 20.21% of total material by cost thereby reducing virgin material exploitation
- About 39.25% of the total material cost was manufactured and extracted regionally thereby reducing the pollution due to transportation
- 10.6% of the total materials by cost used in the project were from rapidly renewable sources and 51.9% of the wood based materials by cost used in the project were FSC certified products.

INDOOR ENVIRONMENTAL QUALITY

- In order to support enhanced IAQ and long-term well-being of all occupants, 30% more than the minimum ventilation rates as per ASHRAE standards have been provided.
- The entire building is a non-smoking building thereby ensuring the health and safety of all its occupants.
- In addition, low emitting adhesives, paints and carpets have been used to enhance the indoor environment and provide superior workplace for all employees.
- After completion of all interior activities, the project has done proper building flush out in line with LEED requirement to enhance their staffs working spaces.
- Provision of a thermally comfortable environment that supports productivity and well-being of all building occupants

NOVELTIES

Eco-friendly housekeeping – use of environment friendly housekeeping practices by using bio-degradable chemicals, to address health, hygiene and well-being of maintenance staff & building occupants.ABN Amro has taken every possible effort as well as the project team has also incorporated as many green concepts and features as possible to make ABN Amro project a superior work environment for all its occupants.

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 about us and our work visit www.en3online.com