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The School KFI, Chennai
- a visual case study

The Context

LOCATION: CHENNAI, INDIA
BUILT-UP AREA: 56,000 SFT ON 2.75 ACRE SITE
ARCHITECT }
GREEN CONSULTANT } GREEN EVOLUTION
PROJECT MANAGER }
CONSTRUCTION PERIOD: JULY 2017 TO JUNE 2018

pc: Tavisan Ramesh

The School KFI, Chennai

- A renowned day school in Chennai had to relocate to a new campus after 35 years in its previous campus
- A challenging move from time, cost and logistics stand-points
- But, an incredible opportunity to create their “dream” campus from the scratch!
- For Green Evolution, this was an ideal opportunity to design an earth friendly campus which would inspire students to embrace a sustainable way of life.
- The new campus was awarded the Green School certification with the highest Platinum rating by the Indian Green Building Council in 2018.



If you lose touch with nature, you lose touch with humanity
- J. Krishnamurti



pc: Shashank Mukundan

The new campus nestled amongst trees existing on site



The Layout



An organic, unconstrained visual and physical flow through the campus and its existing trees thus shaping the buildings and spaces in its path!



Earthy and unique aesthetics attained from the rustic charm of exposed building materials

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An entry through and defined by existing trees



pc: Tavisan Ramesh

Administrative office, kitchen and dining block





The beauty of organic forms and sweeping curves that allow a sense of freedom and blend effortlessly with nature!



pc: Tavisan Ramesh

Assembly hall and library – centrepiece of the campus



The Library



A much-loved space that takes students on journeys of learning...



Junior and Senior School

Classrooms that foster learning



SENIOR CLASSROOM



MIDDLE SCHOOL CLASSROOM

Spacious classrooms and halls which are airy and imbued with natural light and cross ventilation, make for delightful learning spaces which are also extremely energy efficient.



Outdoor learning spaces set amidst nature!



pc: Jaideep Vivekanand

The Art Block

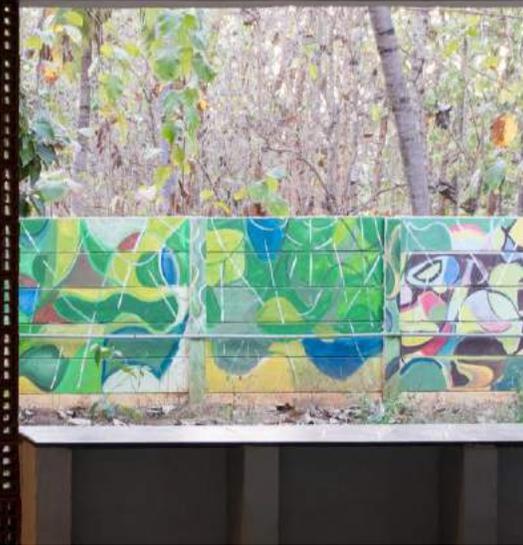
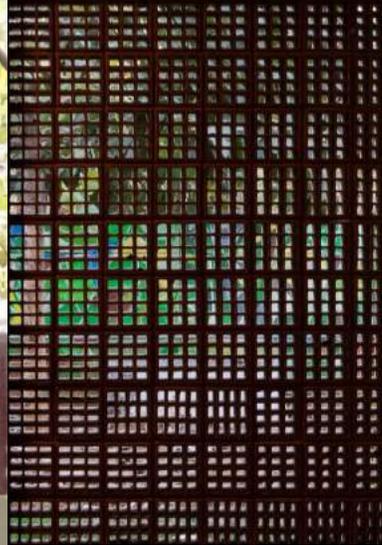
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pc: Jaideep Vivekanand

The Art Block

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An architecture that brings out skill of construction workers in creating art from masonry!



A campus that enables students to play a part and to make a difference



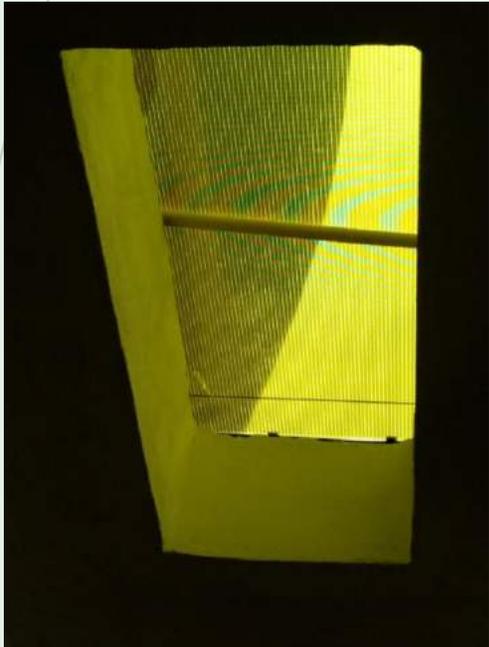
pc: Shashank Mukundan

An earth-friendly campus powered by green technologies



Energy efficiency

A low energy use campus which consumes only 1750 units of energy per month from the grid - equivalent to 2 residences!



SOLAR BIPV SKYLIGHTS



800 LPD SOLAR HOT WATER SYSTEM



9.8 KW SOLAR PV ENERGY SYSTEM

Comprehensive set of green measures and systems to minimize energy use:

- Insulated building envelope: XPS insulation on roof, exterior walls made of Porotherm masonry, shading
- Energy efficient appliances: BLDC fans, LED lights, automatic level controllers, zero energy exhaust systems
- Renewable energy systems: rooftop solar PV, BIPV skylights, solar water heaters
- Energy monitoring using sub-meters

Sustainable water management – a zero water discharge campus



RAIN WATER HARVESTING – SITE & ROOF

WASTE WATER TREATMENT – BLACK AND GREY WATER



LOW FLOW FAUCETS

WATERLESS URINALS

Several strategies and systems implemented to ensure water conservation and sustainable water use:

- Rain water harvesting – 100% of site runoff
- Water use reduction – over 50% using low flow fixtures with aerators, dual flush water closets, waterless urinals
- Waste water treatment – 100% of waste water treated on site and reused for landscape watering
- Water meters – for domestic water and waste water

A green way of life



KITCHEN



DINING HALL



NATURAL CLEANING PRODUCTS



ORGANIC WASTE COMPOSTING

The School KFI has always been renowned for its care for students and sensitivity to nature, which is reflected in its operations:

- Nutritious food prepared on site for all students and staff
- Hygienic toilets and clean, drinking water
- Segregation of waste and composting of organic waste
- Eco-friendly housekeeping and gardening
- Over 50% of students and staff use school buses

A green way of life



DINING HALL



The School KFI : Impact

Key Statistics

- 76 trees preserved on site
- Low construction cost
- Extremely low energy use and cost
→ 50% reduction from old campus
- Water security assured
→ 52% water savings over IGBC norms
→ 100% of rainwater harvested
→ 100% of waste water treated & reused
- Zero waste campus
→ 100% of organic waste composted
→ Remaining wastes sent to recyclers





A campus that relates to nature and leverages state-of-art technologies to ensure holistic environmental sustainability - one that will inculcate in students a love for the environment.



There is the necessary conviction in environmentally sustainable practices, the determined light touch; and there is the practical and wise experience of years of work in construction and project management. Our association with Green Evolution has been for us a source of confidence and delight.

— Ms. Jayashree Nambiar, Principal