

Architecture

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UPDATE



BUILDING PERSONIFIED

via a dynamic facade language



Text, drawings and photographs courtesy: Morphogenesis

To Subdue the Wilderness

Institute for Integrated Learning in Management, Greater Noida Morphogenesis

A diverse climatic aspect of the region stands for a challenging design ontology. Institute for Integrated Learning in Management in Greater Noida spearheaded by Sonali Rastogi from Morphogenesis camouflages the extreme weather condition of the region with an intriguing design expression of brick jaali for an invigorative living-learning experience

The project is for student housing for the Institute for Integrated Learning in Management in Greater Noida, one of the upcoming suburbs of Delhi. The building is intended to house student accommodation for students and support facilities within the existing educational campus. The client brief was simply to create a safe environment in less than INR 1,800 a square foot.

Spatial planning is done in order to engage the students' community, generating various interactive conglomerate spaces, each having its own identity within the overall community yet satisfy institutional/residential requirements. The campus is designed in a multi-building format with a street pattern on a grid to generate the built volumes. Courtyards are introduced and cores are identified by carving out voids at different levels to create a multitude of open spaces in the form of terrace gardens, and courtyards of diverse scales and configurations for multilevel interactions, creating a miniature urbanscape. The buildings are oriented in a manner such that they open inwards while presenting a largely solid façade to the outside. The core sits on the outer periphery to block unwanted winds and act as a solar buffer.

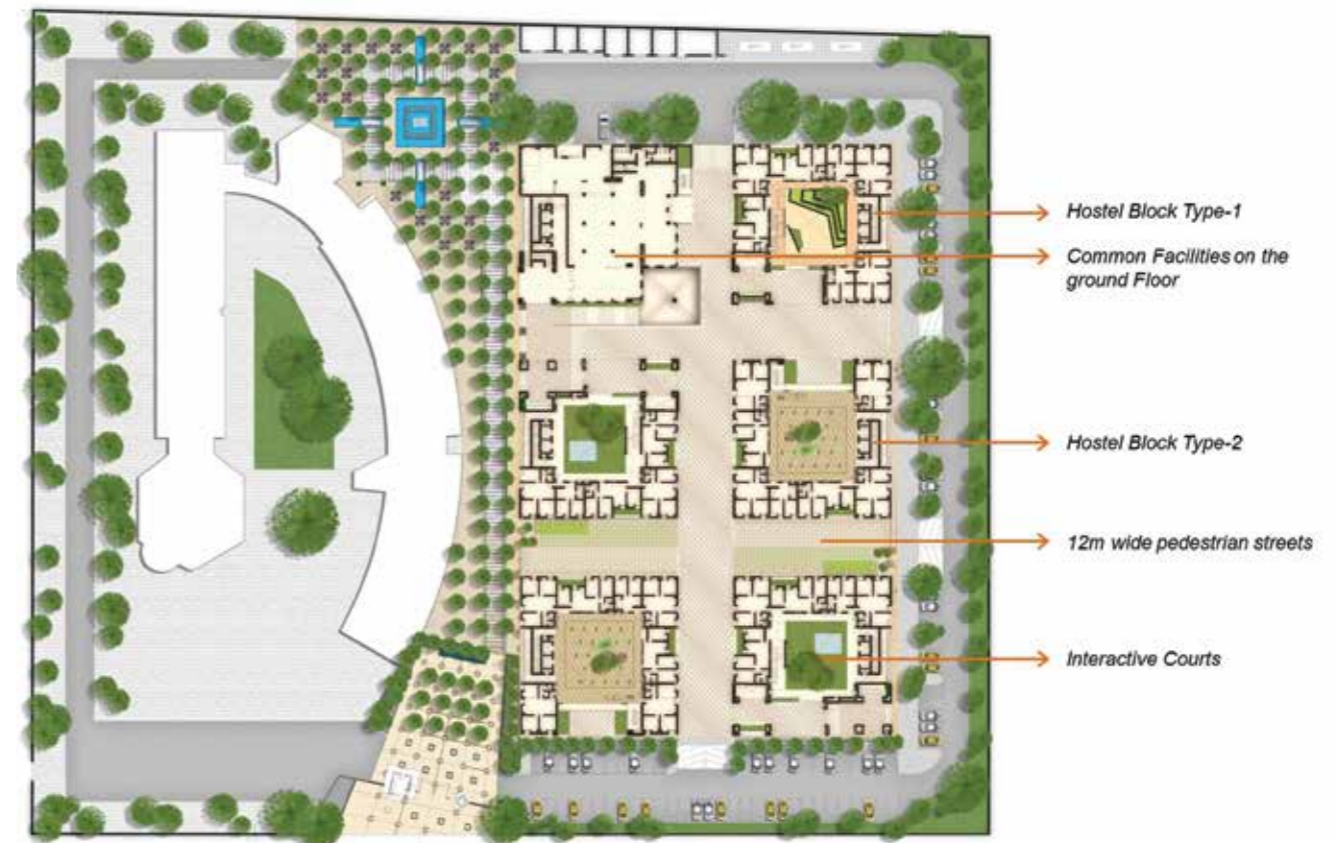
At the unit level, students are housed in an apartment format where 2 to 3 students share a living space with individual bed rooms. Each unit/apartment is fitted with a kitchenette and laundry facilities in order to provide a non-regimented accommodation, distinct from standard hostels. Units are placed along the external periphery for maximum daylight opening to an internal central corridor system. Security, a prime condition of the client brief, is expressed through the design where all circulation spaces are open and visible, and there are no dead ends. The courtyards and terraces encourage interaction among neighbours and the visual connection with the street creates a vibrant community atmosphere.

External conditions for most of the year make open spaces inhabitable. Hence there is a great need for modifying the microclimate. A

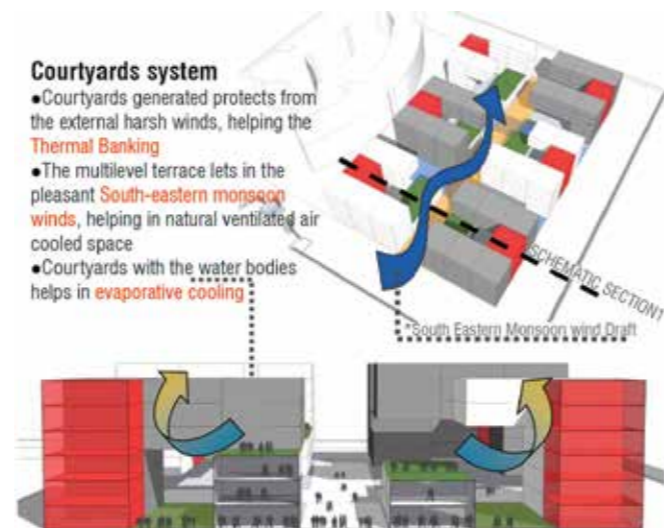


Graduated from the School of Planning and Architecture (New Delhi) and The Architectural Association (London) with a graduate diploma in Housing and Urbanism and a second graduate diploma in Graduate Design, **Sonali Rastogi** is a Founder Partner of Morphogenesis, one of India's leading award-winning Architecture and Urban Design practices based out of New Delhi, India.

Issues related to the environment and sustainability are at the core of Sonali's design attitude and her experience and expertise in Architecture and Design has been recognized by way of numerous awards and accolades. Sonali, along with Mani, has recently been awarded Laureate of the SIA Getz Award for Emergent Architecture in Asia, Singapore 2014, which seeks to bring recognition to Asian architects who through their vision and commitment have made a significant contribution in shaping the changing landscape of Asia. Morphogenesis has been ranked, for the fourth time running, among the Top 100 Architectural Design Firms worldwide by Building Design Magazine, UK in WA100, 2015. The practice is the recipient of over 55 awards and has featured in over 350 publications, both International and National.



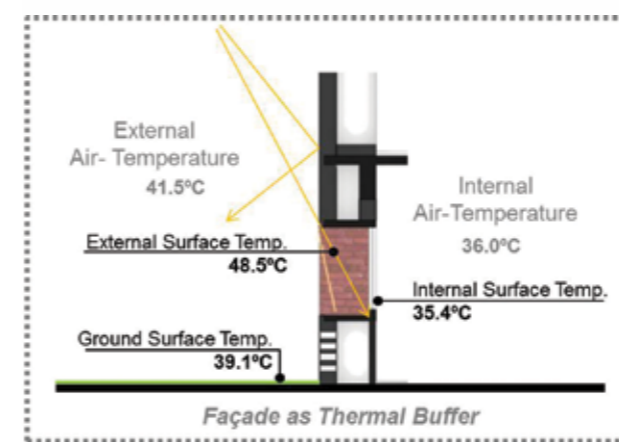
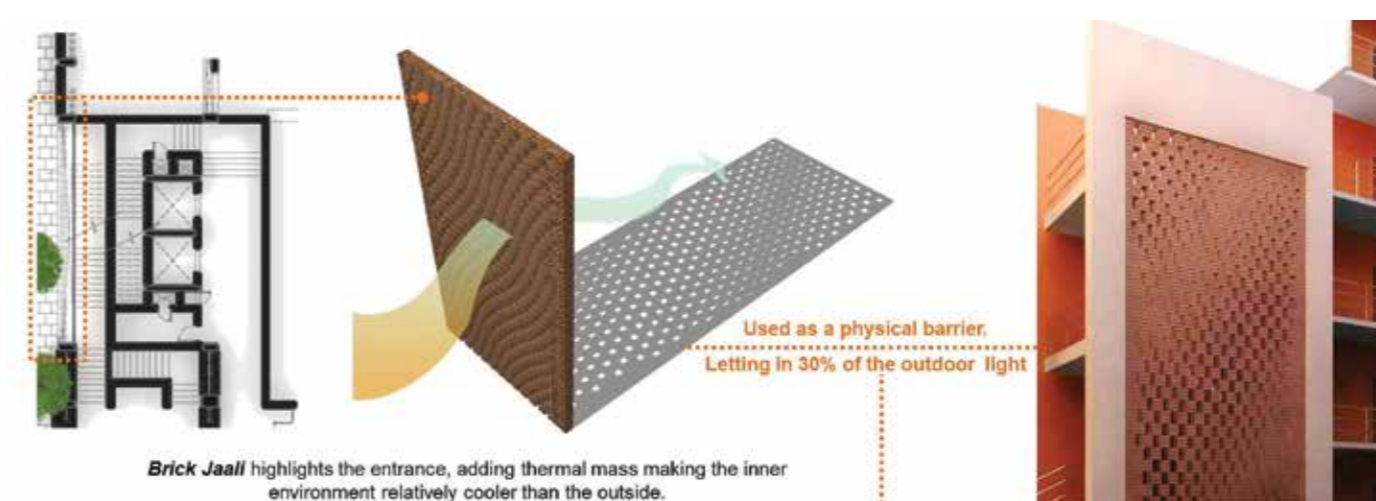
site plan



courtyard system

comprehensive environmental strategy is adopted to ensure the protection of the building from extreme climatic conditions. A compact built form that reduces heat gain is maintained taking care that optimum daylight and cross-ventilation in all the units are maintained. Deep recessed windows are provided for shading and help in controlling optimum day lighting. The façades are designed as the interface between the interior conditioned space and the outside environment, and act as insulators and light filters to control and modulate inside conditions. The use of brick, brick jaalis and other simple finishes helps to maintain a simplistic material palette. The courtyards generate a micro-climate through water bodies and shading. All materials are sourced from within 500km of the site.

A De-centralized solar water heating system is used to fulfill 100% of the hot water requirement. Solar panels are placed on each terrace top,



façade system



façade strategy: solar control

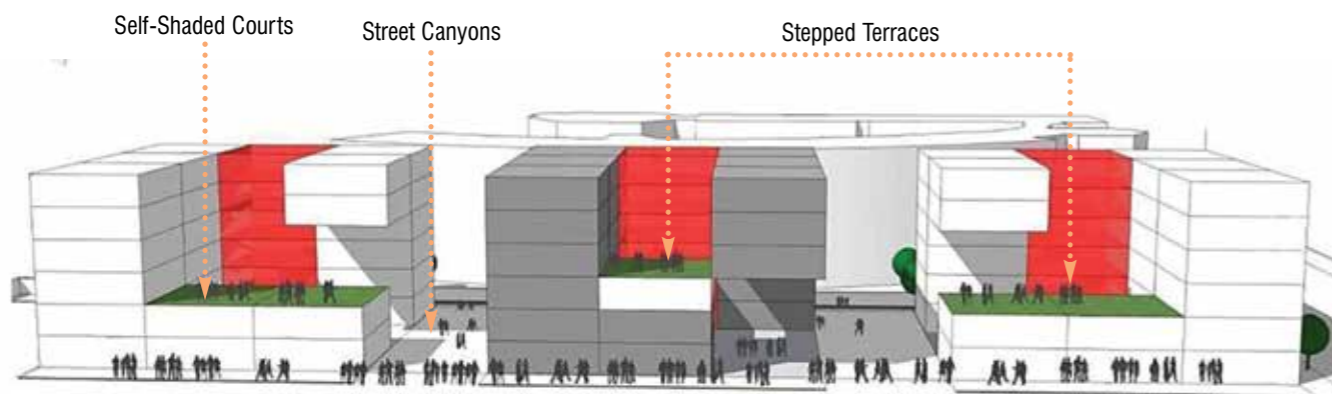
facing the south side to receive the maximum sun. A Sewage Treatment plant in the basement is used to treat the waste water and reuse water for flushing, gardening, and water bodies. The Rainwater Harvesting system uses an RWP Detention tank to collect and treat the water from the terraces and re-circulated within the system. The system uses the water collected on ground to be discharged into the municipal storm water drain.

The landscaping intent is to create a habitable natural microclimate that is environment friendly and energy efficient. Plantation is done to provide shading during summer and to not block prevailing winds. Deciduous trees are planted to cut direct sun in summer. The landscape creates well-shaded walkways leading to a focal point of a water feature with seating space. The water body provides a pleasant sit-out and creates an evaporative cooling effect. The row of thick foliage trees cuts down western winds and helps to form a visual barrier between the building and the service area. The linear plantation is used to highlight the entrance to the hostel block, and also helps to form a physical connection between the academic and the hostel building.



fact file:

Project name	: Institute for Integrated Learning in Management
Location	: Greater Noida
Typology	: Institutional
Client	: IILM
Climate	: Composite
Completion year	: 2013
Built-up area	: 1,75,00 sq ft
Site area	: 8 acres
Consultants	
Structure	: BMSF Design Consultants Pvt. Ltd
HVAC	: Apostle Design Studio
Plumbing	: Apostle Design Studio
Contractors	
Civil and Interior	: Ahluwalia Contractors
Structural	: BMSF Design Consultants Pvt. Ltd.
MEP	: Apostle Design Studio
Landscape Design	: NMP



urbanscape study



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