



**INNOVATION**

Mamit Basu, Morphogenesis

**ARCHITECTURE**

The British School, Morphogenesis  
Bright Horizon Academy, Designworks  
India, AIAA

**SUSTAINABILITY**

Vedanta Centre, CDA

**URBANISM**

Tamri Station Plaza, NBBJ

**STRUCTURE AND ARCHITECTURE**

Chennai Airport

**INTERIORS**

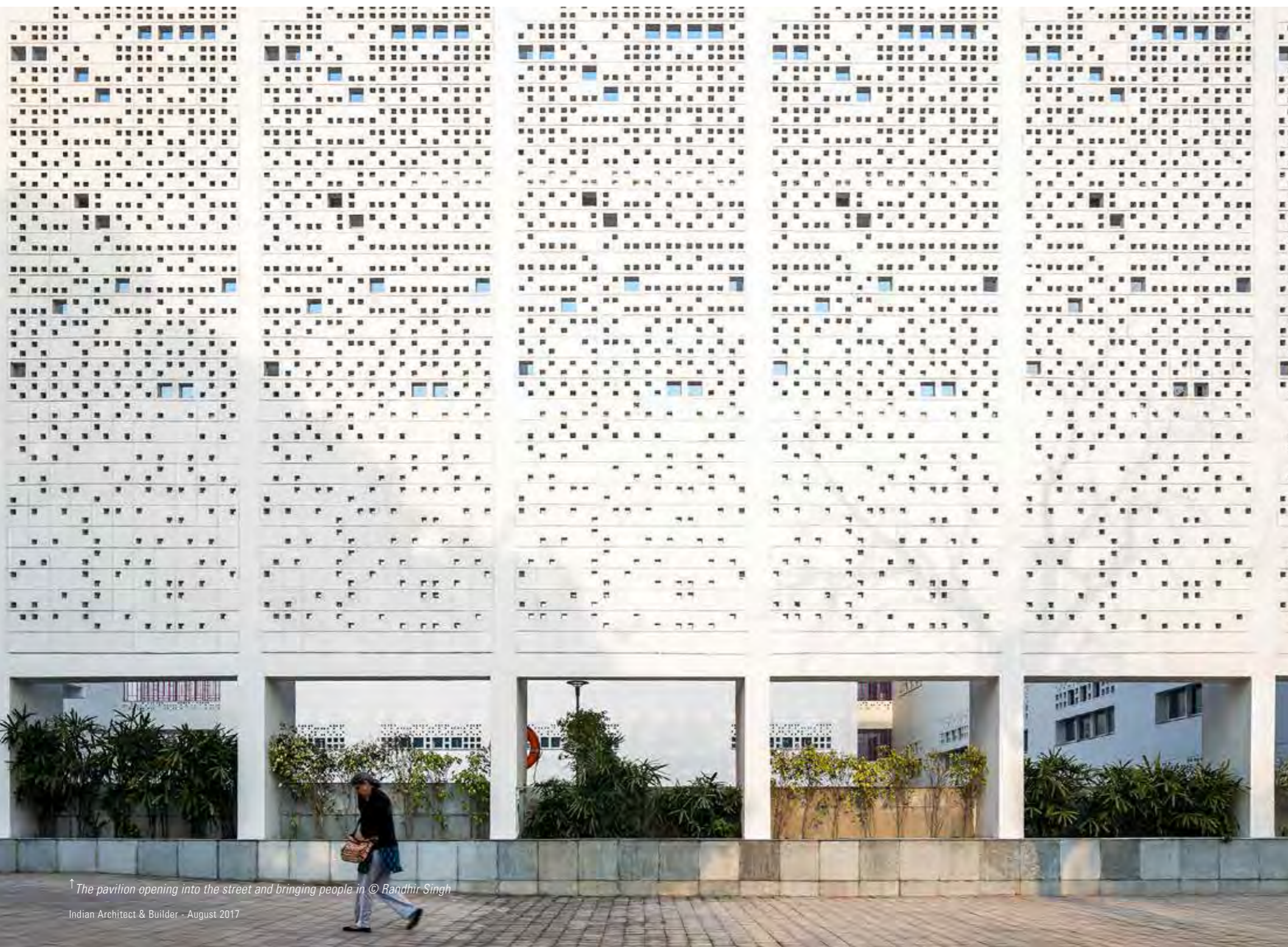
The ReBar Office, PVD&P

# Drawing on the past to redefine the future

The British School, New Delhi

Text: Sharmila Chakravorty  
Drawings & Images: Morphogenesis

In today's increasingly competitive world, schools are constantly under pressure to provide the best for their students – be it in curriculum or in their physical environment and facilities. This becomes even more pronounced when the students happen to come from around the world, making the school a melting pot of cultures. What, then, is a culturally appropriate design for a school that is inclusive, state-of-the-art, and yet embraces sustainability? As a response to these musings, and catering to the diverse expatriate community in New Delhi's diplomatic enclave, The British School by Morphogenesis draws inspiration from Indian traditional architectural techniques to offer a truly world-class learning environment that is yet rooted in its context.



↑ The pavilion opening into the street and bringing people in © Randhir Singh



↑ © Randhir Singh



↑ © Randhir Singh

There is no dearth of research and reports that indicate the importance of holistic education. Plus, there is unprecedented competition today, not only for our children but also their schools. Naturally, schools are stepping up their game like never before. This includes both, the way they design their curriculum, and the physical infrastructure they provide. And so it comes as no surprise that there is now an increasing demand for an architecturally appropriate school building, complete with well-thought-out, well-designed spaces that aid students' all-round development.

And yet, there is a paradox here. Often, the response to this demand is a building that scores high on aesthetics, guzzles up energy to offer an air-conditioned, sanitized environment that is typically associated with an 'international' feel. But is this the best type of school for our children? Moreover, is it the best possible option in terms of terms of sustainability, architecture and design?

Morphogenesis' design for The British School in New Delhi presents a design thinking that attempts to defy the norm. The school has

students from over 55 nationalities, making it a truly diverse assortment of curious minds eager to be shaped. Thus, the design had to be socio-culturally inclusive, creating an atmosphere that fosters social cohesion. The design thus resonates with the School's motto – An international education with an Indian soul. With this motto as the guideline that informed and shaped the design, the architecture makes a compelling case for a renaissance in the school-building typology.

The school sits on a tight site in space-constrained central Delhi. In order to double its student strength of 650 to 1300, a new building was to be constructed. However, this new building had to be built on the existing site, without disrupting the existing school which would be eventually phased out. And so, the design of the new building was developed in phases, around these constraints, enveloping the existing building.

The perimeter block was constructed in the first phase, transferring and accommodating in it, the existing operations. Then, Phase



↑ Façade © Morphogenesis

It was built on the vacated old school building site, housing additional classrooms, laboratories, sports facilities, arts wing and a Performing Arts Centre.

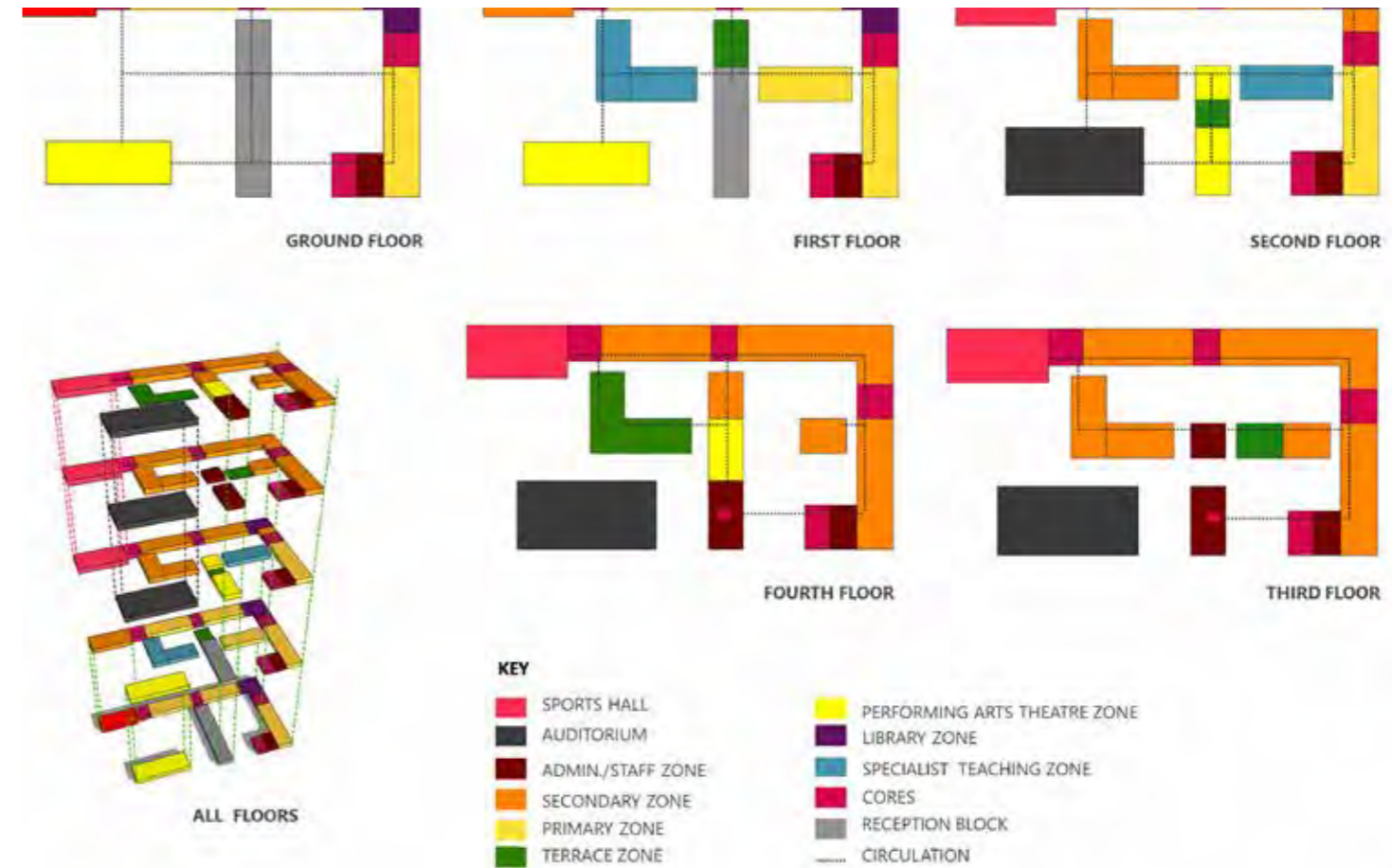
The school's design excels in a number of areas, but resource optimization is where it shines the most. There is a conscious effort to minimize the reliance on mechanical systems. What are we trying to convey through the design of most buildings today? That we are incapable of surviving without air conditioning? Sure, it gets hot, it gets cold. But is that something so significant that we are willing to risk our environment, and eventually our planet, just so that we are at a comfortable 24-degree C? Perhaps with these questions in mind, Morphogenesis advocated that 50% of the school be non-air-conditioned. To that end, their expertise in traditional passive methods has been used to temper the non air-conditioned environment, create transition spaces to manage the indoor - outdoor temperature differential and hence optimize energy consumption. This creates an environmentally experiential learning environment. The design intersperses a

system of courtyards throughout the school, carefully planned so that they enjoy shade throughout the year. Thus, these spaces can be used not only as transition spaces but as extended learning environments. Similarly, the school has a number of semi-enclosed breakout spaces, constantly transforming the way students interact with one other, and their surroundings. This sensitivity in design opens up a whole world of chance-encounter opportunities for children to form friendships, bonds, and make memories. After all, schools aren't only about academic learning, are they? Especially in a school that has students from 55 nationalities, there is possibly more to learn about social skills and multicultural nuances outside of the classroom!

These breakout spaces have been consciously placed along transition areas, such that the activities they facilitate become an integral part of the student experience, enhancing their holistic socio-cultural awareness and demonstrating the school's outreach philosophy at the same time. Also, the multi-functional nature of these spaces helps immensely in optimizing the use



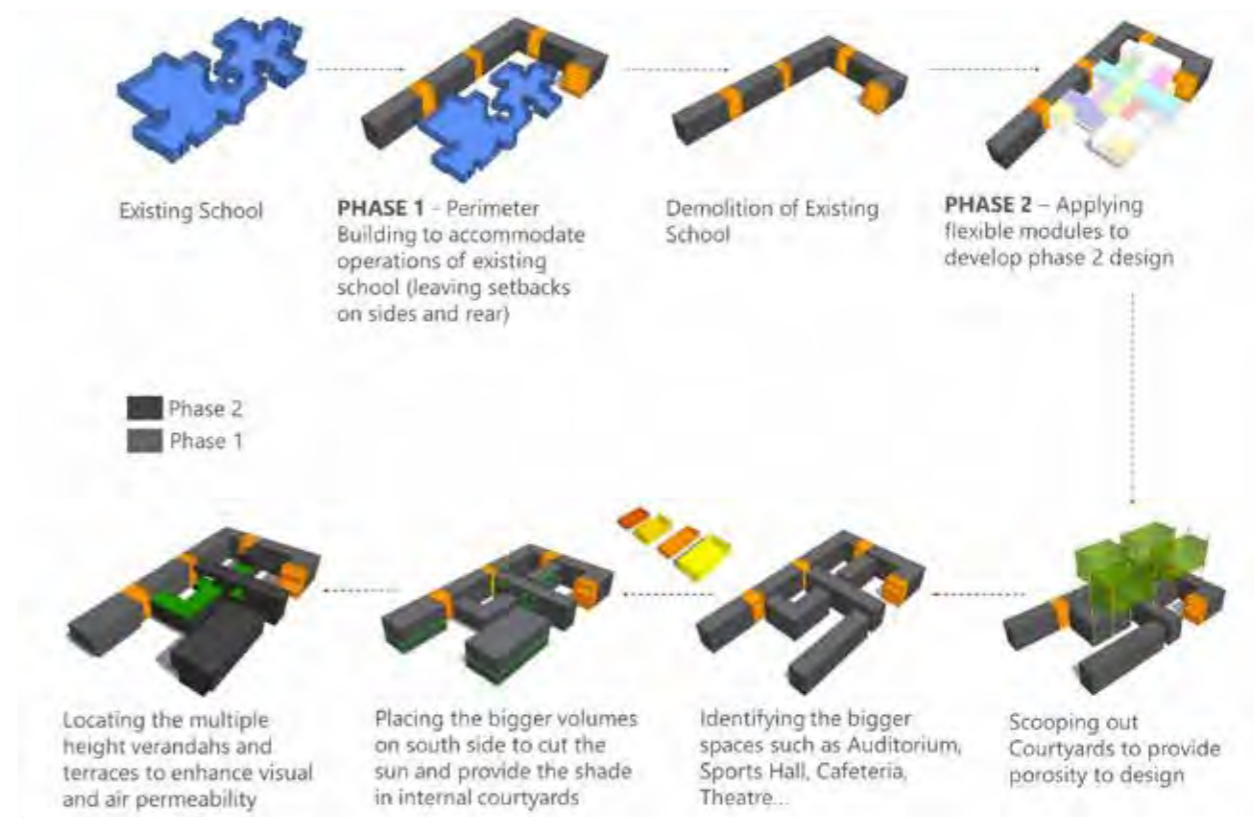
Model © Jatinder Marwaha



Organisation & Circulation.



Site Plan.



Design process & Morphology.

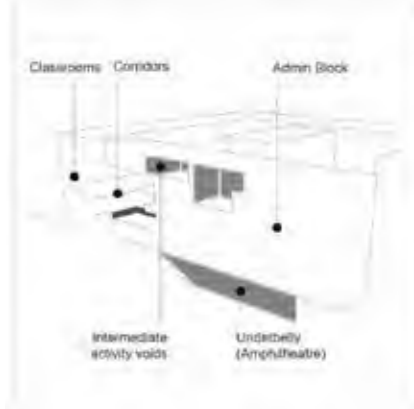


4th Floor	Lab
3rd Floor	Class Rooms
2nd Floor	Class rooms
1st Floor	Class rooms
0 Floor	Class rooms

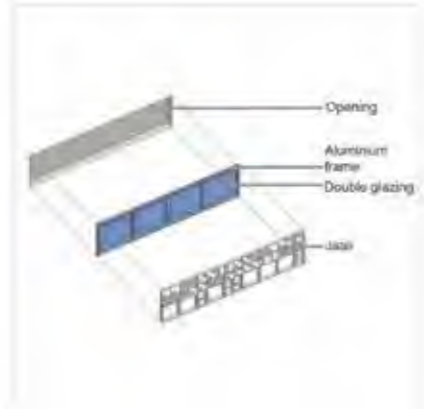
Fourth floor labs with fewer habitable hours act as solar buffer for the lower floors (classrooms and other activities) that have longer usage hours.  
 The semi-open corridor acts in a similar manner



Earth Sheltering & Semi-outdoor spaces



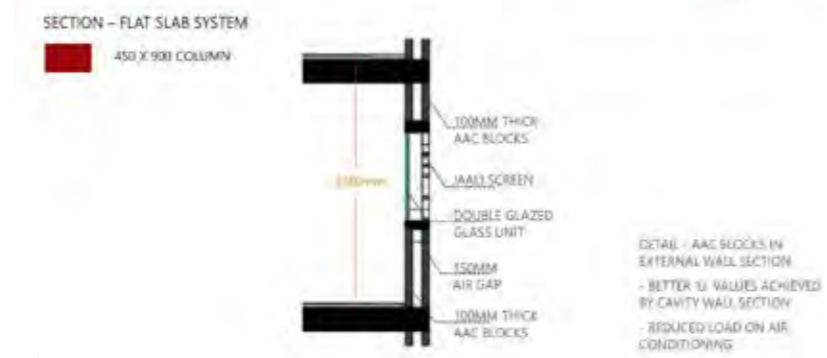
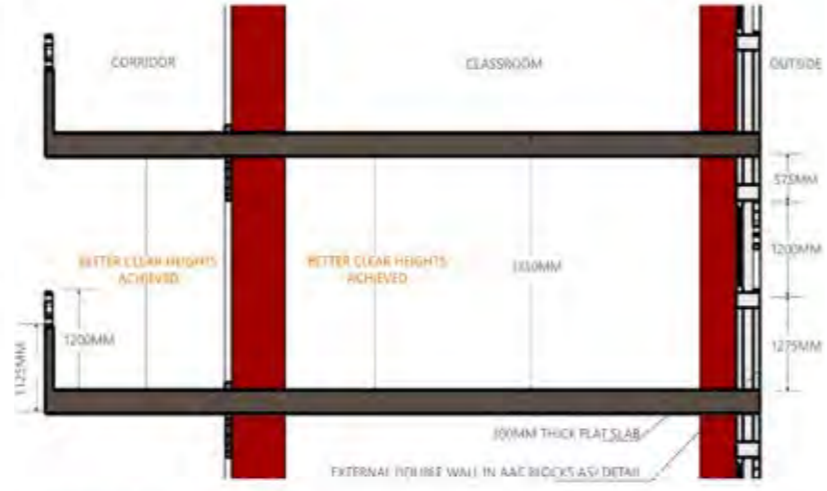
Double skin



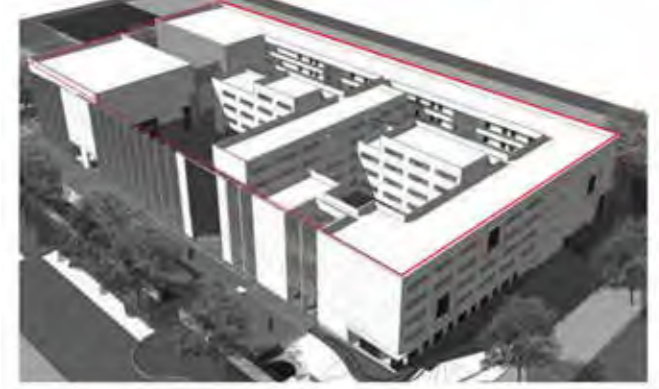
Ramp to Nursery Block © Jatinder Marwaha



Window Jaali Sun Shading.



Structural Innovations.



Fenestration.



Reception © Randhir Singh



Courtyard © Randhir Singh



© Randhir Singh



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Auditorium © Randhir Singh



© Morphogenesis



Sports Hall © Jatinder Marwaha

of space in the space-challenged urban context. Thus, indigenous architectural elements such as internal courtyards, chajjas (deep overhangs) and verandahs are employed to provide opportunities for students to engage with the environment and nature. Similarly, inspired by traditional chaupals (outdoor gathering spaces) in India, some of these courtyards are designed for students to sit beneath the shade of mature trees. Special care has been taken to ensure that these trees were saved and protected during and after construction, illustrating a conscious decision to build sustainably. Similarly, bioswales, rain gardens, and a visible rainwater harvesting system are also telling signs of a deep, unswerving commitment towards sustainability.

What is a consistent, commendable feature of any work that comes from Morphogenesis is that sustainability is always at the core of the design. Not peripheral, not a layer added to appease certification boards. Sustainability is the very central idea around which the design evolves. And once you assign 'sustainability' the most important, central role in design, the other aspects seamlessly fall in place, much like pieces in a puzzle.

In designing this school with sustainability at the heart of the approach, Morphogenesis expertly delivers a tangible testament to their design philosophy. The student-centred approach of the school

too is brilliantly reflected in the school building. Not only that, the school also demonstrates how design doesn't have to shy away from traditional building knowledge to create a modern, futuristic building that provides a holistic, inclusive environment for young minds that will go on to shape the world of tomorrow. ■

**FACT FILE:**

Project Name	: The British School
Typology	: Institutional
Location	: New Delhi, India
Completion Year	: 2014 (Phase 1) / 2016 (Phase 2)
Client	: The British School Society
Built-up Area	: 2,97,000 Sq.Ft.
Site area	: 5.30 Acres
Climate	: Composite
Credentials	: Consultants
	Structure: Optimal Consultants
	HVAC: AECOM
	Plumbing: AECOM
	Electrical: AECOM
	Landscape Design : Design Cell
	Fire Fighting: AECOM