



National
Association of
Students of
Architecture

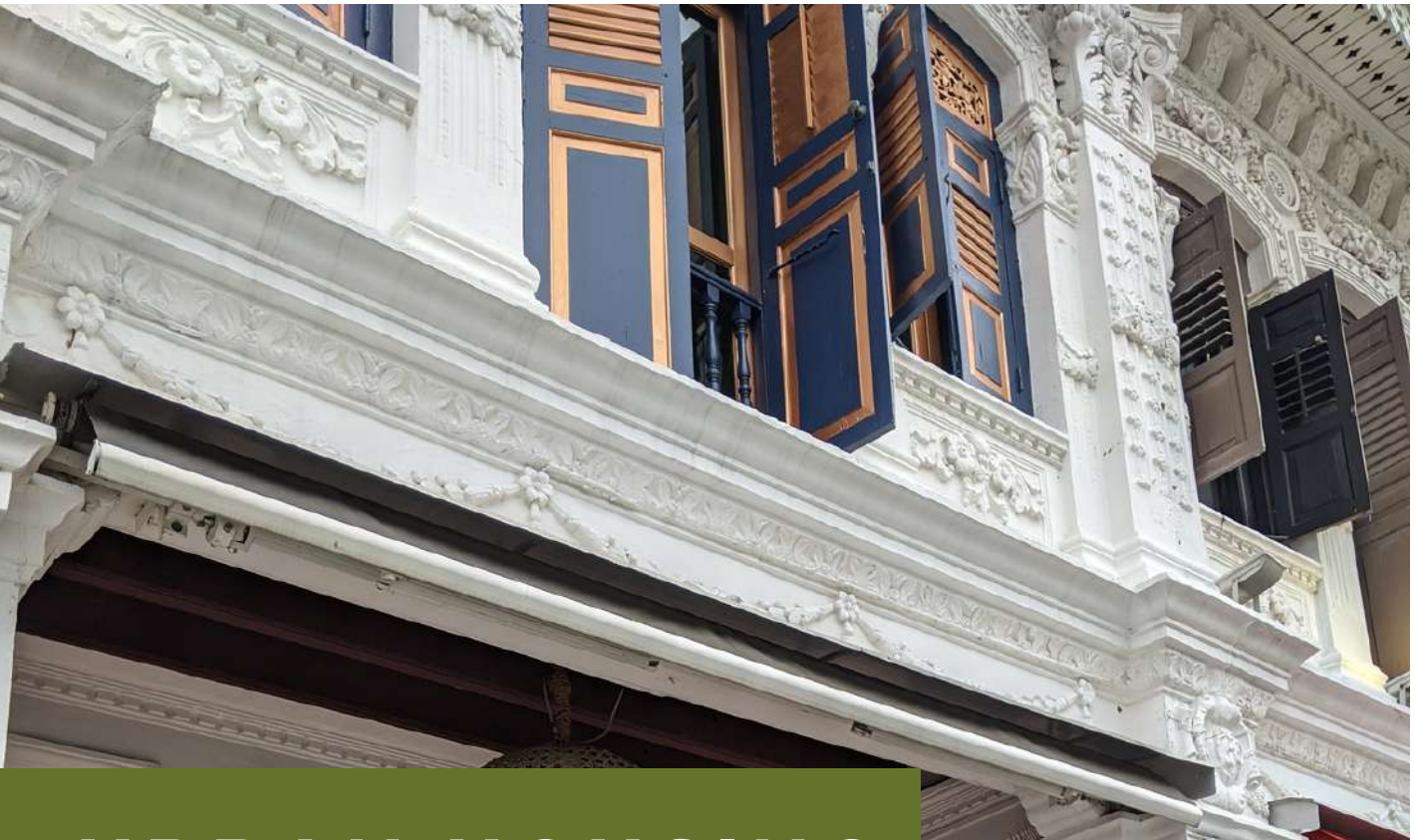


**SINGAPORE
JULY 2024**

THE ARCHITECTURE EXPERIENCE

Gardens by the Bay

**AN EXPERIENTIAL LEARNING COURSE ON
URBAN HOUSING, DEVELOPMENT, AND
SUSTAINABILITY IN SINGAPORE**



Kampong Glam

URBAN HOUSING & DEVELOPMENT

Seeing a confluence of various cultures and ethnicities, the architecture in this city-state is shaping its own identity through advancements in urban housing, development and innovation. The participants will get to study agencies and their holistic approach (policies and implementation) towards a focus on providing housing for all, the evolution of public housing, the transformation of urban areas, and planning models used to create a sustainable environment with a high quality of life. The change in the course towards biophilic and regenerative design, be it through the incorporation of vertical gardens or vegetative landscapes or innovation in urban planning.

Why Singapore?

Young architects could benefit exponentially from observing architecture in a country which has a colonial past including starting points for nation-building post-independence with an intent to provide housing for all. Also observed is Singapore's rapid success in overcoming its spatial and resource constraints and transforming itself from a third-world to a highly liveable first-world city-state today. Participants also get to observe newly rejuvenated housing districts (HDBs) in Singapore which retain the distinctive qualities of local identity areas through setting design guidelines for existing and new developments and retaining key elements.



The
Pinnacle@Duxton

THE ARCHITECTURE EXPERIENCE

The best approach to growing as an architect is to learn from experiencing and observing. **The Architecture Experience** aims to do just that. Participants get to observe the evolution of urban housing and innovations in the field through site visits and interactions with agencies, and document the learning in a themed narrative for later referencing.

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**7 DAYS,
20 PARTICIPANTS**

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These visits will focus on evolution of public housing through the years and the current focus based on current needs of creating a sustainable environment with a high quality of life, involving the community as stakeholders. All the while looking at sustainability as an underlying theme from the macro to the micro level. The visits also include observations of local-identity areas that are also being rejuvenated with new public spaces, upgraded streetscapes, or sensitive injection of new homes and amenities.

IMPORTANT PLACES VISITED



GARDENS BY THE BAY

Gardens by the Bay in Singapore is renowned for its innovative architectural features blending nature and technology. The park spans 101 hectares and includes three waterfront gardens. The Supertree Grove comprises vertical gardens up to 50 meters tall, with canopies that provide shade and collect rainwater. These structures also house solar panels to generate energy. The Flower Dome and Cloud Forest are massive conservatories showcasing plants from around the world.

The park's design integrates sustainable practices, such as rainwater collection and recycling, and its architecture symbolizes Singapore's commitment to environmental conservation and urban greenery.



URA MUSEUM (SINGAPORE CITY GALLERY)

Spread across 2,400 square meters and three floors, the gallery explores Singapore's remarkable transformation over the past 50 years through 10 thematic areas and 50 interactive exhibitions. The first floor focuses on urban planning and architecture, aligning with the Urban Redevelopment Authority's objectives.

The second floor showcases a replica of central Singapore, while the third floor features permanent exhibits on historic preservation, sustainable development, and urban design. It's a comprehensive exploration of Singapore's development story.

IMPORTANT PLACES VISITED



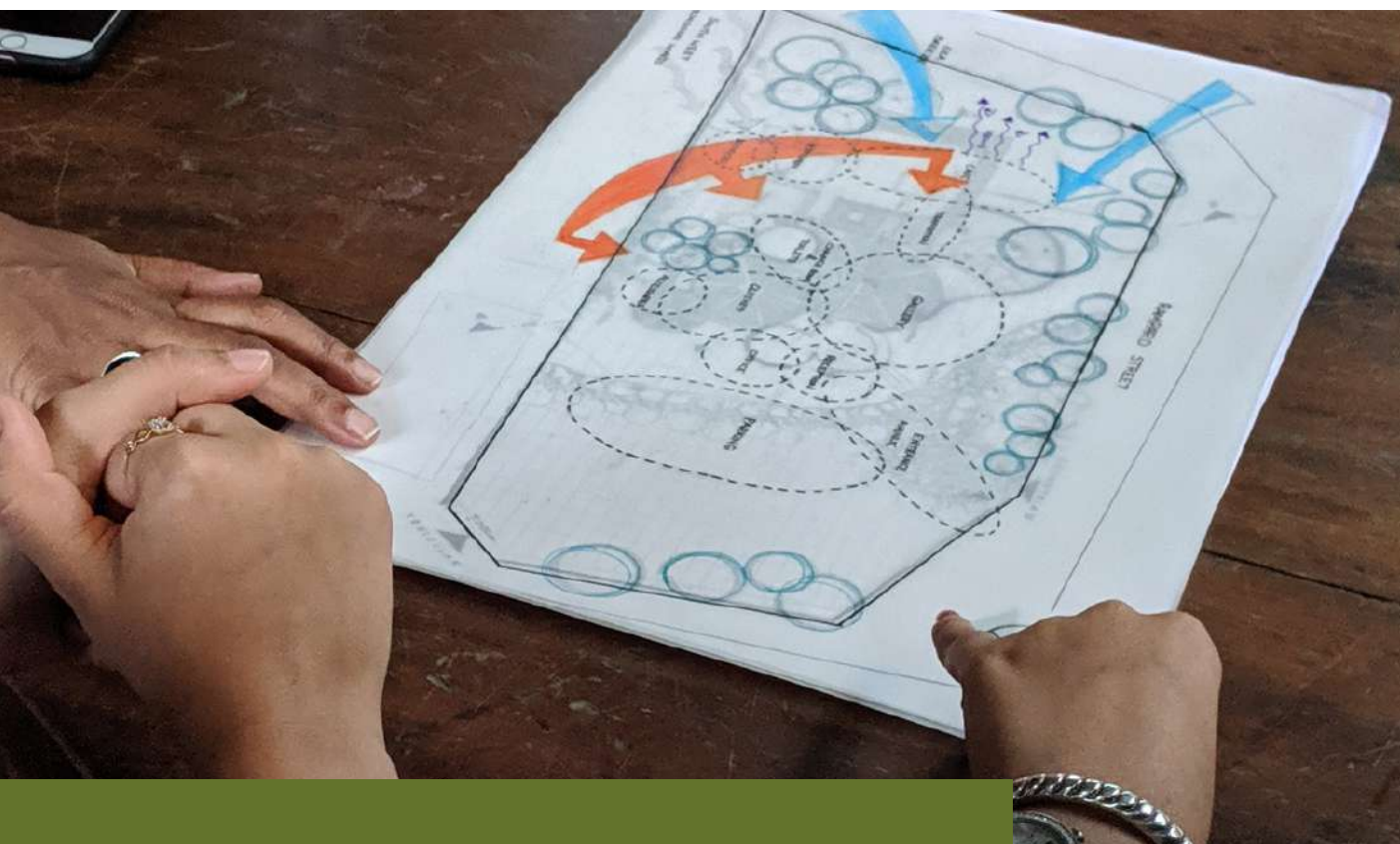
The Pinnacle@Duxton is an HDB, home to almost 8000 residents, thrice the density of a normal housing estate precinct. At a density of around 320,000 persons per square kilometre, this Superdensity project is an important demonstration of the liveability of high-rise high-density housing.

By transforming the ground into a social dynamo, both receiving and generating social activities for the residents as well as for the city, the design has turned what might have been a congested space of car parks and services into a meaningful landscape full of potential for social interaction and bonding.



The Marina Barrage is an iconic landmark amalgamating engineering and architecture. The five-acre site is designed to house seven massive pumps as part of a comprehensive water management system to prevent flooding and transform the Marina Basin into a freshwater reservoir. The project is a showpiece of environmental sustainability and has won the Green Mark Platinum Infrastructure Award.

Sustainable principles are applied in all aspects of the design, construction and operation of the barrage to utilise energy and water efficiently and minimise waste generated.



Project work by the
October 2019 batch - A pop
up pavilion design

CAPSTONE PROJECT OVERVIEW

The experience is designed with the intent of enhancing architectural understanding, by creating a hands on and interactive learning layer on top of a curated travel plan. Throughout the trip, participants will visit architecturally relevant sites, both historic and modern.

**“ ON TOUR
DISCUSSIONS,
ON SITE
OBSERVATIONS,
ASSIGNMENTS AND
FEEDBACK ”**

They will explore methods of observation and documentation while focusing on urban housing and its development. Participants will be given an existing project in which they will have to conduct a basic SWOT analysis and identify areas that could be enhanced by ideologies of urban housing, development, and sustainability. Participants will engage with the curator in daily sessions and discussions. Participants will also get to engage in dialogue with professionals from local agencies and draw parallels with their design approach back home in India.

For the participants who desire to, there would be an option to extend the project where they get to work on a concept plan to develop and rejuvenate an existing housing area by addressing specific urban challenges they face in their home cities.



Clarke Quay

WHAT IS IN IT FOR ME?

Participants get to understand urban housing as a concept, and how to draw parallels with the Indian geographic. Participants will document and consolidate their observations, engage in critical thinking and design exercises, and build a repository of knowledge created over the experience.

Post the trip, this work may be published and exhibited with collaborating organisations and media outlets.

From a learning perspective, participants get to understand how their domain of interest approaches sustainability, and how they can work towards Sustainable Development Goals in their projects.

At the end of the Experience, participants will have an improved practical understanding of what they study in college and learn how to implement these strategies into their own project, enhancing their portfolios.

Participants may also get internship opportunities from our partners.

**“ RELEVANT PROJECTS,
INTERNSHIP
OPPORTUNITIES,
UNDERSTANDING OF
VERNACULAR
SUSTAINABILITY**

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EXPERIENCE OVERVIEW

DAY 1

Arrival in Singapore.

Orientation on the structure of the tour visits and project. Finalisation of teams and the participants' individual roles and responsibilities within the team will be defined.

Cultural visit: Kampong Glam area.

DAY 2

Topics of discussion: Understanding the historical context, heritage, and urban planning of Singapore.

Places to visit: URA City Gallery, National Library Building, Maxwell hawker centre.

Cultural visit: Chinatown.

DAY 3

Topics of discussion: Environmental sustainability, HDB's approach to urban planning and public housing.

Places to visit: The Pinnacle @ Duxton, HDB Gallery, Tiong Bahru Heritage Trail.

Cultural visit: Tanjong Pagar hawker centre.

DAY 4

Topics of discussion: Planning with sustainability integration at a micro and macro level.

Places to visit: Singapore Mobility Gallery, Helix Bridge, Esplanade + Art Science Museum + Marina Bay Sands (outside visit).

Cultural visit: Clarke Quay, Boat Quay.

DAY 5

Topics of discussion: Protected landscapes of the city, usage of natural light and ventilation, adapting water systems and flood protection techniques.

Places to visit: Henderson Wave, Sustainable Singapore Gallery, Marina Barrage, Gardens by the Bay (dome visits not included).

DAY 6

Topics of discussion: Building around natural resources, understanding material and innovative construction technologies, spatial planning and green features in public areas.

Places to visit: Tampines Hub, Jewel @ Changi Airport.

Cultural visit: Orchard Road.

DAY 7/8

Free Day

Culmination of the tour, brief on submission of Capstone project.

Departure to India or home country.



Curator -
Ar. Rachita Bhonsle
(B.Arch)

CURATOR & TOUR LEADER

The Architecture Experience Singapore is curated by Rachita Bhonsle, who will also be accompanying the participants on the tour. Rachita is a senior architect at a private firm which specialises in high-rise buildings and high-density residential communities. She has a background in environmental policy management, sustainable design, and energy-efficient planning.

Rachita has worked mainly in the residential, hospitality and educational sectors. She is passionate about climatology-based design, the environmental impact of built spaces and sustainable site planning. These principles have driven her work for the last decade.

Timeline

- 2007-2012 B.Arch, MS Ramaiah Institute of Technology, Bangalore
- 2012-2014 Vishwannath Associates, Bangalore
- 2015 Graduate Certificate Program in Energy and Sustainability – Major in Environmental Policy and Management, University of Denver, Colorado, USA
- 2016 Rogue Architecture, Wheatridge, Colorado
- 2017-2023 Poornakriti Architects, Bangalore

ALUMNI TESTIMONIALS



KRASHANG GOSWAMI

4th Year, DIT Dehradun

Participant - The Architecture Experience Singapore (Dec 2019)

The overall experience was excellent. In all the places we visited, the learning experience was highly intuitive. The credits for that could be given to the technological advancements in Singapore, and also to the amazing people who accompanied us on this trip. We got to dive into the Urban development and housing aspects of Singapore. My experience with Reena was amazing. She helped and guided us about everything, and helped us in understanding all the aspects. All the experiences were actually very well integrated, and they complimented each other. So personally, I liked the entire experience. Definitely a 10 on 10!



TEJESVINI S R

4th Year, SRM SEAD, Ramapuram, Chennai

Participant - The Architecture Experience Singapore (Dec 2019)

To read and attend lectures about urban development is one thing but to actually witness it in person is incomparable. Visiting the URA Centre and the HDB Hub, with their interactive, ultra-informative exhibits and proposals, showed me just how multi-disciplinary and collaborative urban study really is. The knowledge gained through the long, interactive heritage walks made up for the exhaustion we had to endure in the process! I'd definitely recommend The Architectural Experience trips to my friends and peers.



NADIA ALFIA SOLOMON

4th Year, SRM SEAD, Ramapuram, Chennai

Participant - The Architecture Experience Singapore (Dec 2019)

Coming as a student to learn and coming as a tourist are completely different experiences. As a student, in the past few days, we covered nearly the entire planning of Singapore. We visited a lot of informational places associated with urban planning which gave us a better understanding of the by-laws, thought process, innovation & technology, sustainability and future planning of Singapore. We got to see how Singapore is a good example of urban planning and sustainability. Our interactions with Reena were also so informative. She shared a lot of resourceful information and experience which was really helpful for us. A 10 out of 10!



MOHANAPRIYA M J

4th Year, SRM SEAD, Ramapuram, Chennai

Participant - The Architecture Experience Singapore (Dec 2019)

If I had planned a trip to Singapore with my family, I wouldn't have seen places like Tiong Bahru, Queenstown, and Toa Payoh. This Experience was truly informative and will be very helpful for our semester Urban Design project. We were able to think and analyze the planning, living, needs of people, sustainability, etc. from a different perspective. Reena was able to guide us all the course and was very helpful and approachable. The walking tours were very informative too!



SUSTAINABLE DEVELOPMENT GOALS

All our Experiences are aimed at implementing and solving the 17 Sustainable Development Goals set by the UN.

Goal no. 17, Partnerships for the Goals, is key to our Experiences, since we work with a global team of experts to be able to add value to the learning of the participants.

The Architecture Experience focuses on 3 of the Goals primarily -



Goal 9: Build resilient infrastructure, promote sustainable industrialization and foster innovation

- Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being



Goal 11: Make cities inclusive, safe, resilient and sustainable

- By 2030, ensure access for all to adequate, safe and affordable housing
- By 2030, enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement
- By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters



Goal 12: Ensure sustainable consumption and production patterns

- By 2030, achieve the sustainable management and efficient use of natural resources
- Support developing countries to strengthen their scientific and technological capacity to move towards more sustainable patterns of consumption and production



THE HAPPY LLAMAS

At **The Happy Llamas**, we curate Experiences for participants to show them how their domains work in the real world, and how they approach sustainability. Why?

We believe that the world has a lot to offer, and only on going out and engaging with different cultures in different corners of the world can one get a holistic view of life, and evolve personally and professionally. We also feel strongly about the need to make this planet, the only one that we have, more sustainable.

Keeping these two thoughts in mind, we work with domain and subject matter experts to co-curate Experiences where we inspire today's youth on how to make this world a better place to live for themselves and their peers, and creating positive global impact in their domains of interest.

We invite you to join us in this journey, and be a part of an inclusive and global community of changemakers!

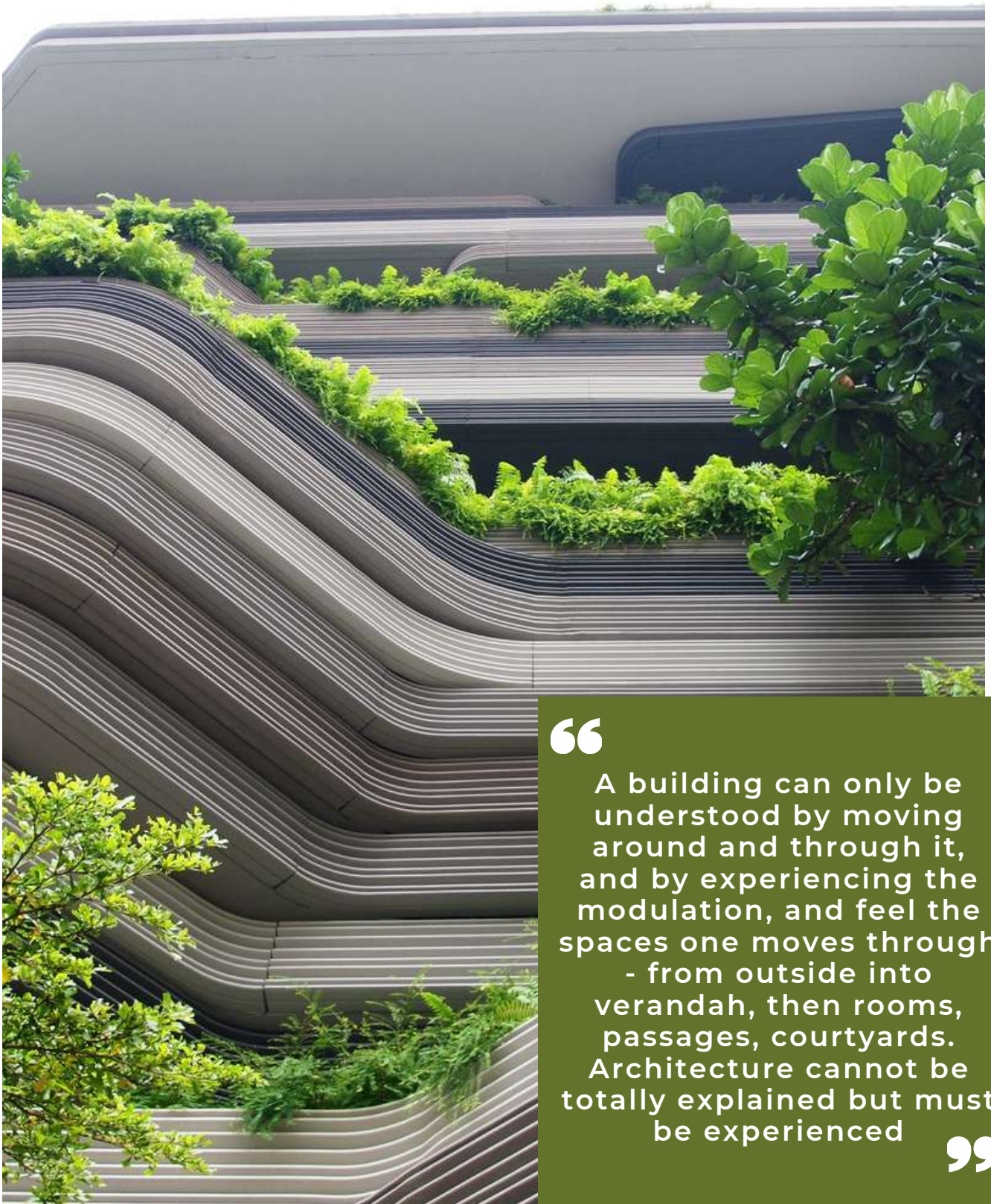
Contact Us

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WE ADHERE TO WORK TOWARDS THE SUSTAINABLE DEVELOPMENT GOALS



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A building can only be understood by moving around and through it, and by experiencing the modulation, and feel the spaces one moves through - from outside into verandah, then rooms, passages, courtyards. Architecture cannot be totally explained but must be experienced

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GEOFFREY BAWA

ParkROYAL Hotel on Pickering by WOHA architects. Photo by William