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**OTEMON GAKUIN
UNIVERSITY
ACADEMIC-ARK**
MITSUBISHI JISHO SEKKEI

AEMULUS AT THE RUNWAY

DESIGN UNIT ARCHITECTS

HOUSE IN THE SKY

VERSIFY STUDIO

REFLECTIONS AND ASPIRATIONS



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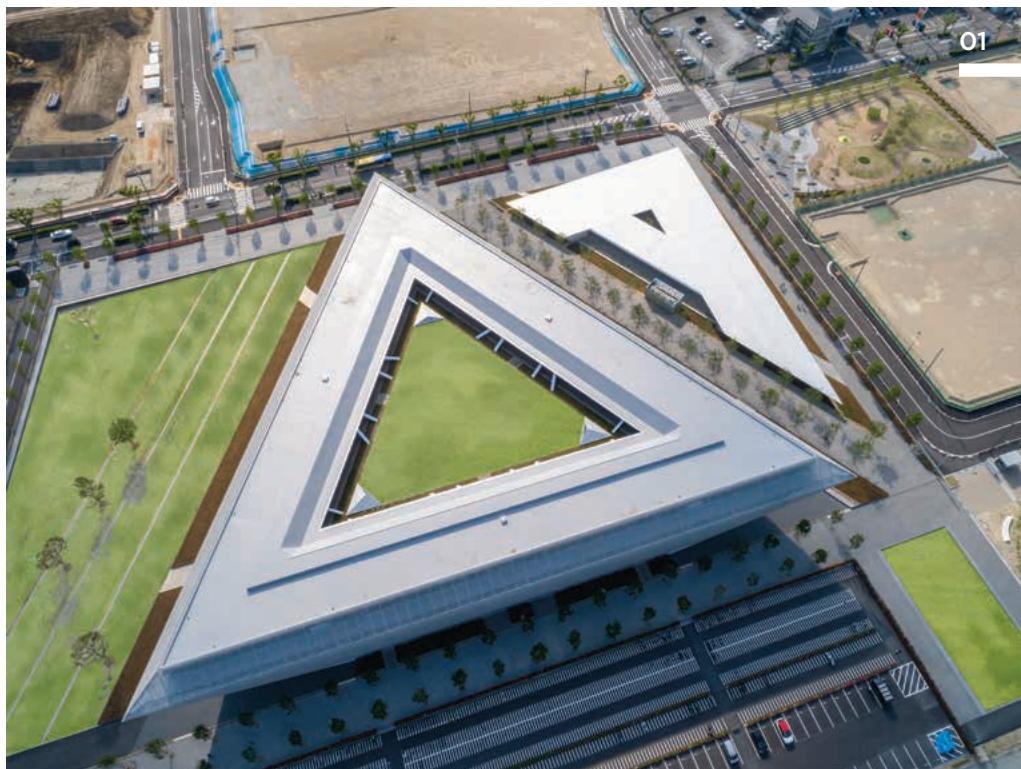
SINGAPORE \$8 MALAYSIA RM18 HONGKONG HKD90 AUSTRALIA AUS\$14.95 OTHERS US\$12

TEMPLE OF LEARNING

OCCUPYING A SITE THAT WAS FORMERLY PART OF A TOSHIBA FACTORY, ACADEMIC-ARK IS A NEW CAMPUS IN OTEMON GAKUIN UNIVERSITY IN IBARAKI CITY, OSAKA DESIGNED TO FOSTER A SENSE OF COMMUNITY.

WORDS
MICHELE KOH
MOROLLO

/
PHOTOGRAPHY
SHINKENCHIKU-
SHA, HISAO SUZUKI,
NAOIMI KUROZUMI,
YAMAGIWA



Ibaraki City's Otemon Gakuin University is not just a campus for higher learning, it was also designed to become a neighbourhood landmark and community gathering area for residents who live near the university.

Conceptualised by Tokyo-headquartered service architectural firm Mitsubishi Jisho Sekkei, the project was led by Yasuhiro Sube and his colleague Keisuke Aneha.

"Our task was to convince stakeholders that the campus could serve the community at all times, and as architects, we also had to think about how to design a learning site that would inspire students to make that trip to campus," says Sube.

"Since ancient times, Japan's shrines and temples have drawn pilgrims from all corners of the country, so these sacred sites turn into lively gathering places. This was the concept that informed our vision for the new campus,"

Named Academic-Ark, the campus has a total floor area of 20,409m², and contains classrooms, a library, cultural hall, studio and cafeteria that can accommodate approximately 3,600 students.

Though the results are remarkable, the project was quite a challenge for the architects.

They had just 29 months to see the project through from the design to

01. An aerial view of the triangular Academic-Ark. The small triangular building to the side of the Ark houses the cafeteria.



construction phases, which is about two-thirds the duration allocated as a timeline for such a large project.

Their construction budget was also about two-thirds of what was typical.

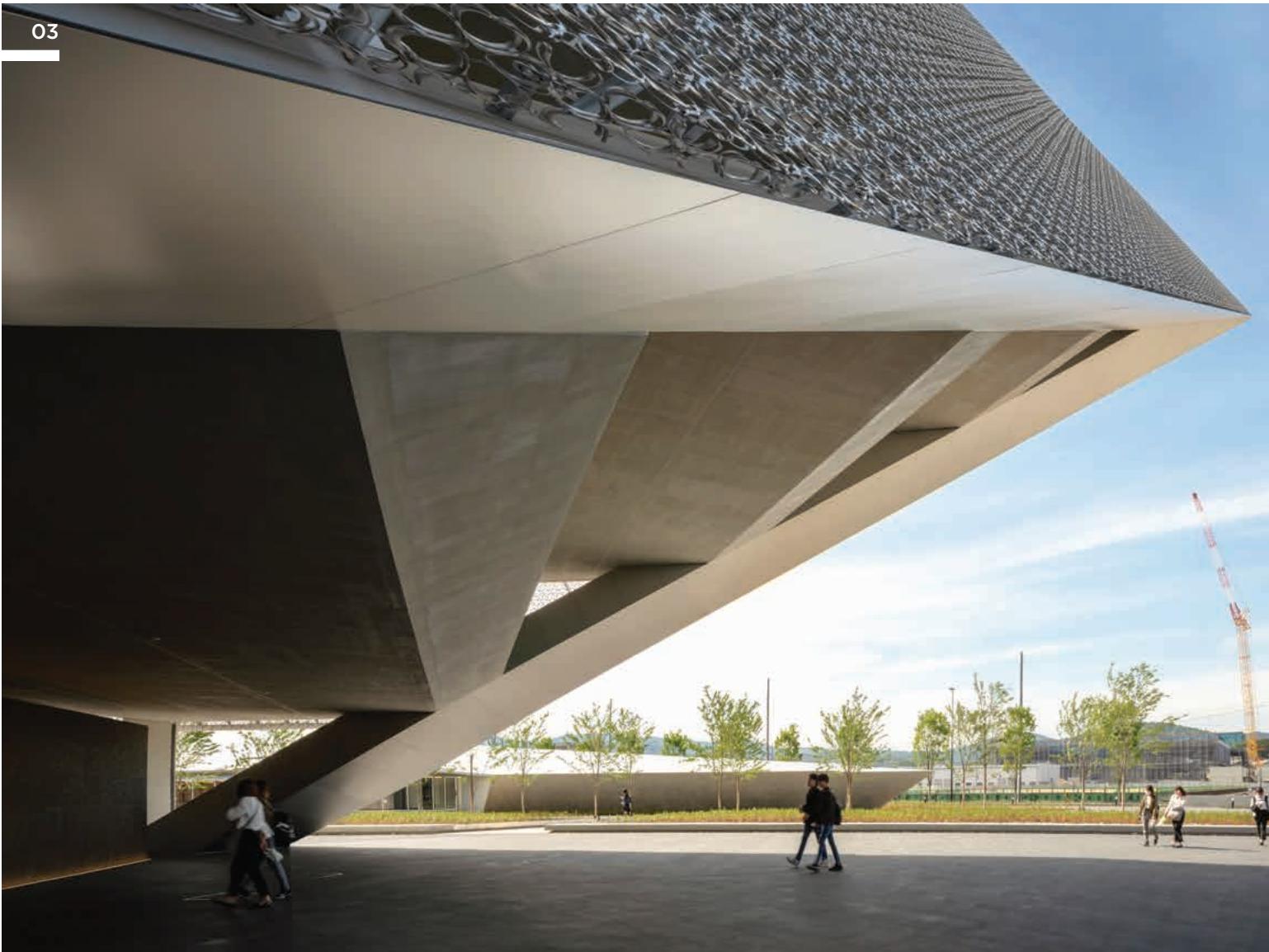
In addition, conservation regulations required that the building site be excavated prior to construction to search for historical artifacts, as there are many ancient ruins buried around the site.

TRIANGULAR FOOTPRINT

"We came up with the idea of minimising the area that had to be excavated by using a triangular shape, and by cantilevering each corner of the triangle, which made the footprint smaller. This significantly reduced construction time and cost," reveals Sube.

The triangular footprint was also effective in encouraging all the excitement and energy of the university's academic

02. The massing of the Academic-Ark is designed as an inverted triangular pyramid and has a stainless-steel, eco-screen facade that gives it a high level of transparency.



03

03. A 40m overhang at the corner of one of the triangular planes serves as the “roof” of the grand entrance.

activities to converge within a single space.

By angling the building's corners steeply inward, the architects created inviting “gates” that serve as entrances for the building's users.

A large town was located on this site around the fifth century AD, and nearby, the ancient tombs of emperors still stand to this day.

Archaeological research suggests that it was a lively, thriving area. Academic-Ark is our homage to the Japanese *haniwa* clay figurine of an ancient house that was discovered within the ancient tombs.

The design is intended to harmonise with the surrounding residential architecture while incorporating elements



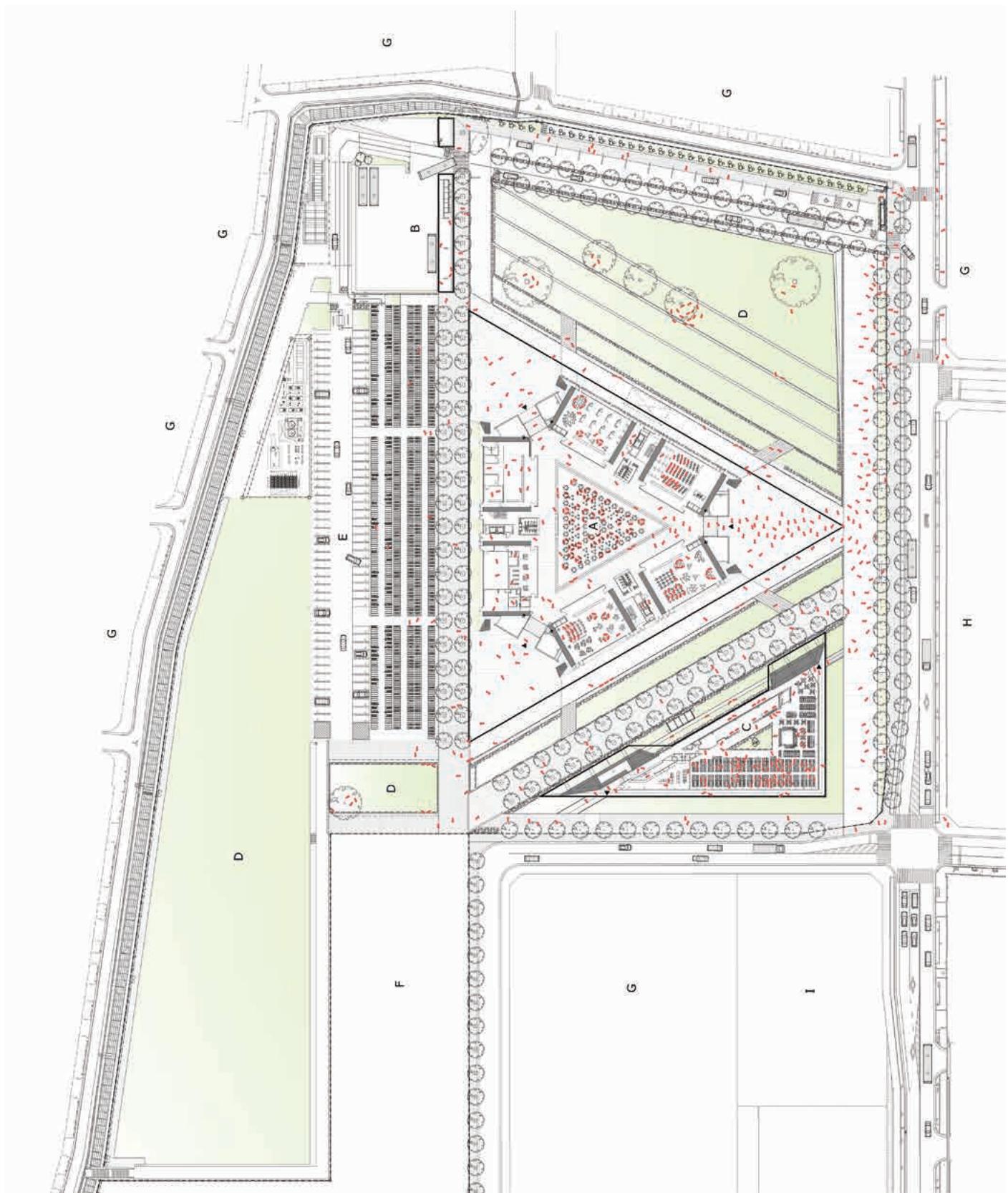
YASUHIRO SUBE,
ARCHITECT,
MITSUBISHI JISHO SEKKEI

of the roofs of houses that stood here a long time ago,” says Sube.

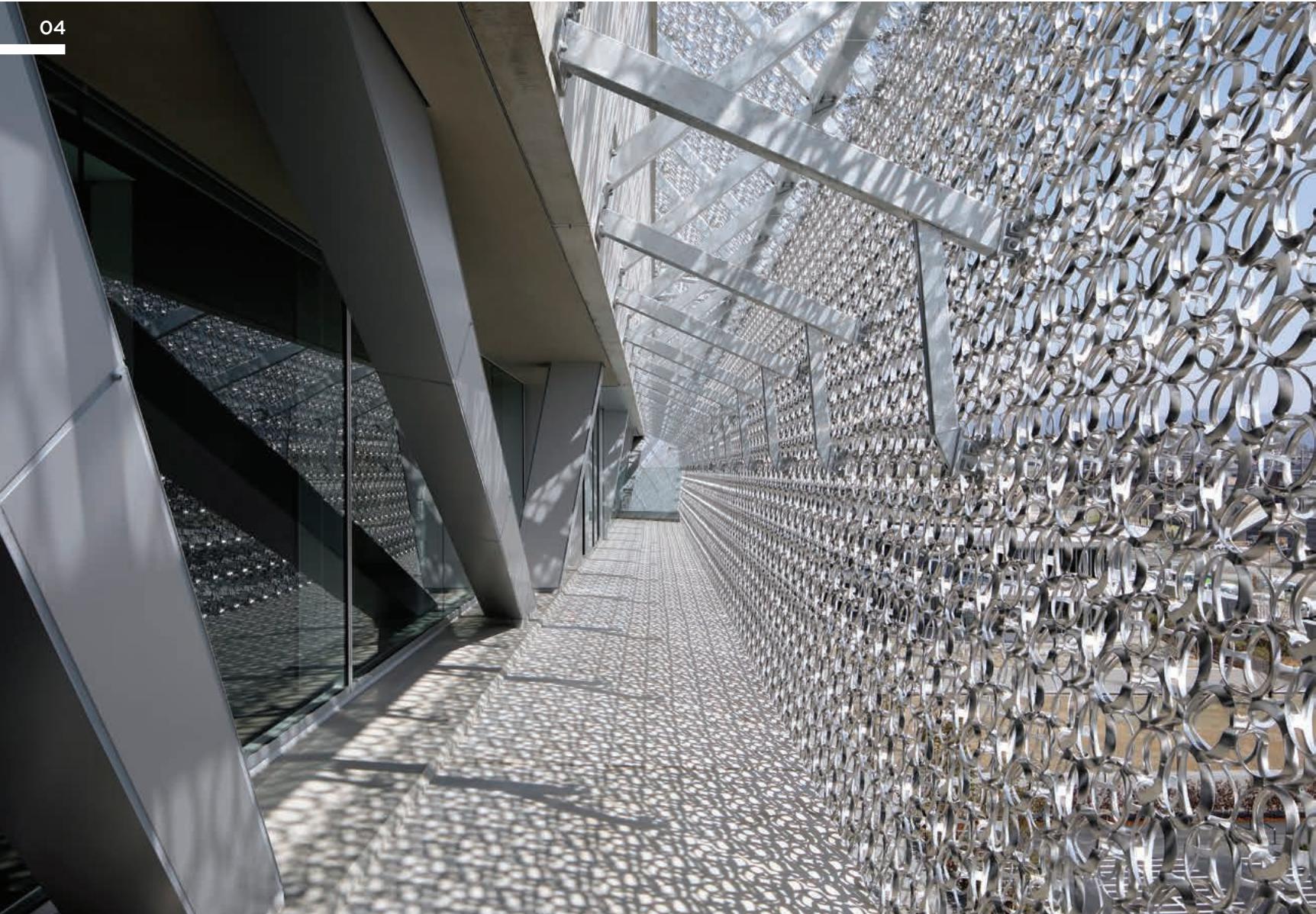
The exterior of the building is clad in environmentally sustainable, reflective aluminum sheets with an embossed mirror finish that illuminates the atrium so it looks like a giant chandelier.

SITE PLAN

- A. Academic arc
- B. Bus station
- C. Cafeteria
- D. Garden
- E. Parking
- F. High school +
Junior high school
- G. Residential area
- H. Retail area
- I. Park



04



"Our inspiration for the surface material came from the K-SPOT spotlights designed by Shiro Kuramata. The fact that there is not a single light on the ceiling of the atrium gives the space an otherworldly atmosphere," says Sube.

Made entirely out of passivised cast stainless steel and manufactured by a factory that makes yacht parts, this first-of-its-kind "eco-screen" features a cherry-blossom motif and reduces the need for air conditioning by half during the summer months.

Other passive cooling elements include a rooftop garden on the fifth floor and a triangular corridor-like terrace with large eaves that encircle the garden to help reduce

the amount of heat entering the building from the roof.

These green spaces also allow students to relax or study while connected to the outdoors.

SILVER FLOATING LIBRARY

Upon entering the building, users encounter a massive, floating silver volume in the main hall, which contains the library and a "book trail" that encircles the centripetal space.

Rather than leaving the entire interior of the building open, the architects created this cosy, enclosed space as an oasis where students can read or chat with friends.

Six large classrooms are located along

04. A terrace on the perimeter of the fourth floor affords a close-up view of the "eco-screen" inspired by the cherry blossom flower.



05

05. The community hall is a gathering place that can be viewed from anywhere in the building.



06

06. The library was designed as a silver block that appears to float in the centre of the building.



07

the flanks of the library on the second and third floor, and 21 small classrooms are located along the flanks of the fourth and fifth floors.

Between the library and the "book trail" is a large void that visually connects all the levels to increase interior transparency.

The floating library is connected to the third and fourth floors via six bridges, so users entering the library from various points are visible, though the interior is not.

"This aspect of the design makes people curious about the space. The inside contains three seamlessly interconnected levels, with three skylights overhead to give a sense of the passage of time," says Sube.

07. The staircase within the library can also function as a stage for presentations.

FLOOR PLANS

**OTEMON GAKUIN
UNIVERSITY
ACADEMIC-ARK**

LOCATION
Osaka, Japan

/

COMPLETION

2019

/

SITE AREA

64,415m²

/

BUILDING AREA

6,752m²

/

TOTAL FLOOR AREA

20,409m²

/

ARCHITECT

Mitsubishi Jisho Sekkei

/

LEAD ARCHITECTS

Yasuhiro Sube &
Keisuke Aneha

/

STRUCTURE

S+SRC

/

**STRUCTURAL
ENGINEER**

Mitsubishi Jisho Sekkei

/

**ENVIRONMENTAL
& MECHANICAL
ENGINEER**

Mitsubishi Jisho Sekkei

/

LIGHTING DESIGN

akari+DESIGN
associates

/

TEXTILE DESIGN

Yoko Ando Design

/

ART COORDINATION

Mitsubishi Jisho Sekkei

/

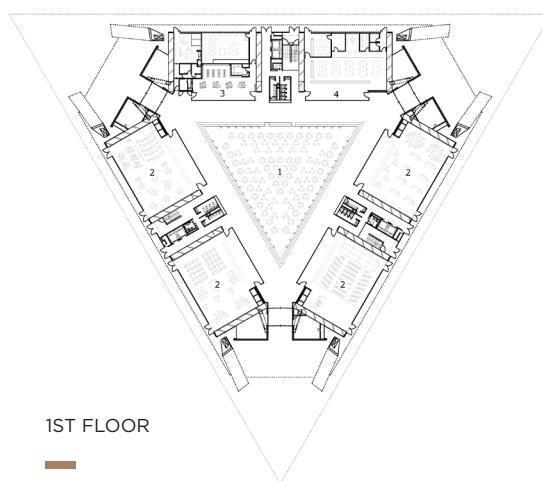
**CONSTRUCTION
SUPERVISION**

Mitsubishi Jisho
Sekkei

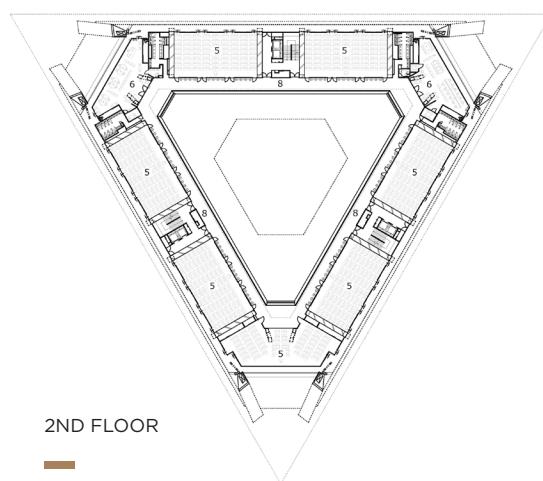
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**PROJECT
MANAGEMENT**

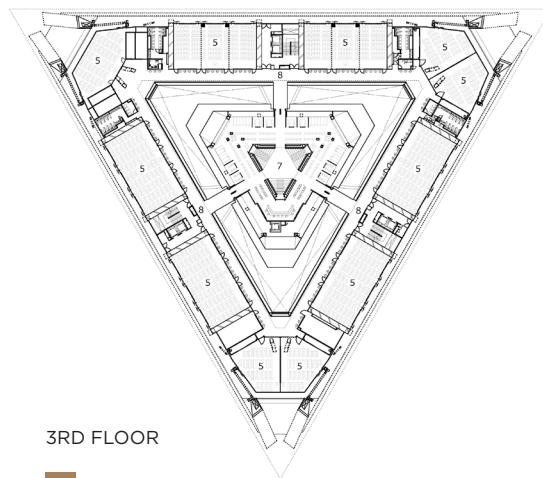
Mitsubishi Jisho
Sekkei



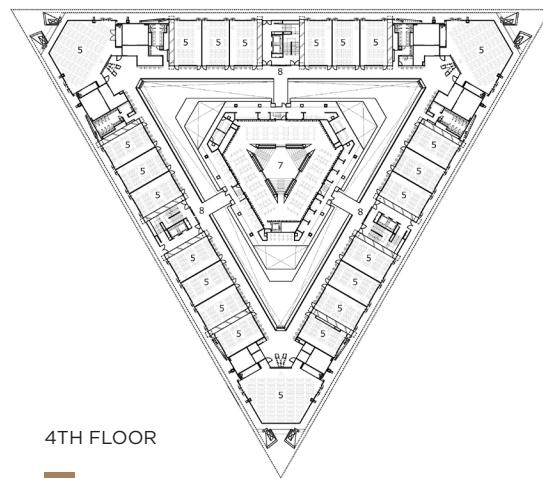
1ST FLOOR



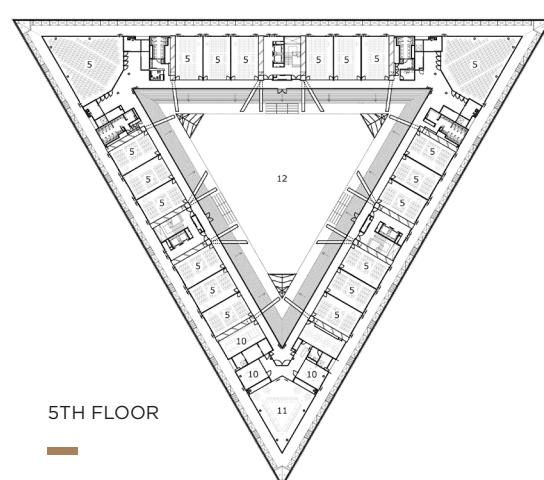
2ND FLOOR



3RD FLOOR



4TH FLOOR



5TH FLOOR

- 1. Community hall
- 2. Studio
- 3. Bookshop + cafe
- 4. Reception
- 5. Classroom
- 6. Student support office
- 7. Library
- 8. Corridor of books
- 9. Faculty office
- 10. Admin office
- 11. Conference room
- 12. Rooftop garden terrace



08-09. A view of the cafeteria building from the middle and high school campus building.



In order to create a distinctive design, Mitsubishi Jisho Sekkei Inc consulted with structural engineer Kenji Nagayama and proposed several different ideas that could be discussed when selecting a contractor to determine the construction plan.

For difficult elements such as the "eco-screen" and the steel frame, the architects used computational design, including BIM, to produce design data that could be used consistently in construction and manufacturing.

To further reduce the overall construction

cost by 60 percent compared to a typical building of the same scale, they used off-the-shelf residential windows.

"The completed Academic-Ark provides new routes for walking through the neighborhood and has become a place for residents in the community to spend time with books and mingle with the students."

"At night, the Ark is attractively lit and has become a popular date spot for people both within and outside the neighborhood," says Sube.

ODE TO OSAKA

THE SYNERGISTIC EFFORTS OF KAJIMA DESIGN AND TARA BERNERD & PARTNERS GIVE THE NEWLY LAUNCHED ZENTIS OSAKA HOTEL AN APPROACHABLE LUXURIOUSNESS THAT'S IN LINE WITH THE CITY'S INDUSTRIAL AND COMMERCIAL CHARACTER.

WORDS
MICHELE KOH
MOROLLO

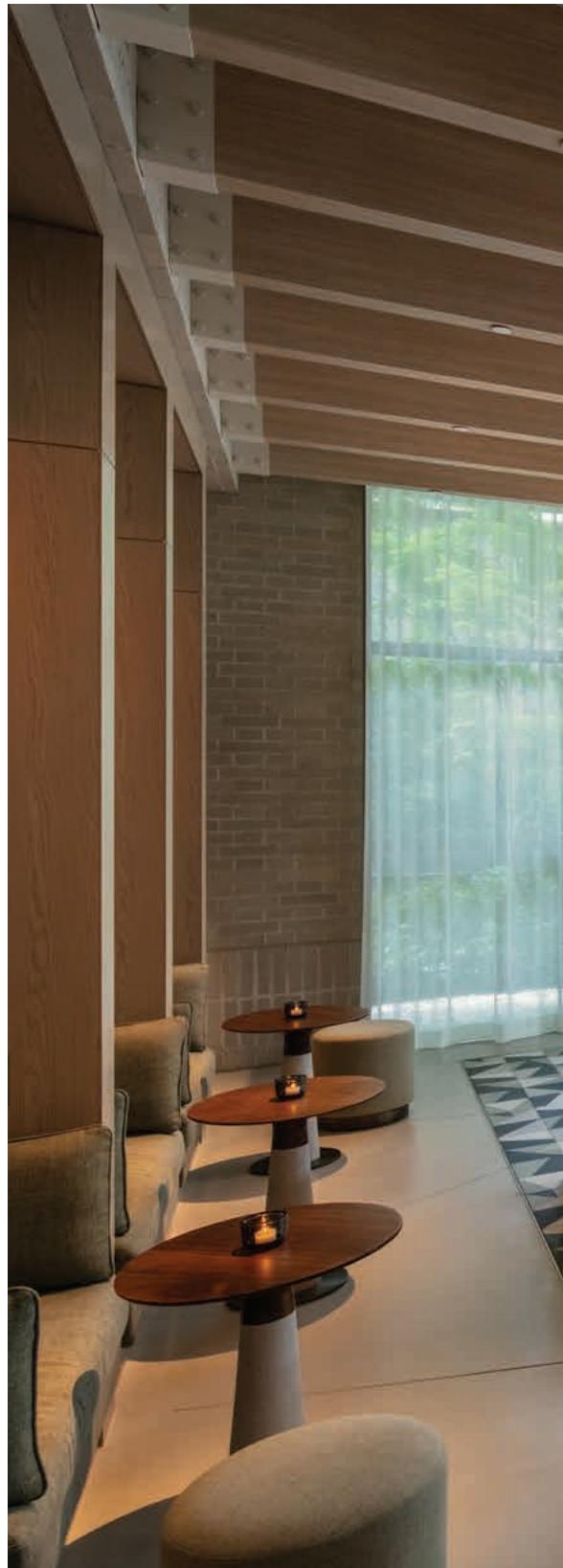
PHOTOGRAPHY
STIRLING
ELMENDORF AND
ZENTIS OSAKA

01. Tara Bernerd & Partners worked closely with Kajima Design to set back the façade of the building in order to create a seamless link between the garden and entrance.



Tokyo architecture firm Kajima Design and London-headquartered interior design practice Tara Bernerd & Partners teamed up to create the Zentis Osaka – a design-led hotel by Palace Hotel Management that opened its doors in July this year.

The 16-floor Zentis building includes 212 guestrooms that are each between 25m² and 57m², 27 one-bedroom apartments for lease, a reception lounge, fitness centre and UPSTAIRZ, the hotel's singular F&B outlet with dining, bar and lounge areas.



02. Locally sourced bricks were used in the reception lounge as an homage to the industrial heritage of Osaka's Dojimahama district where the hotel is located.

02



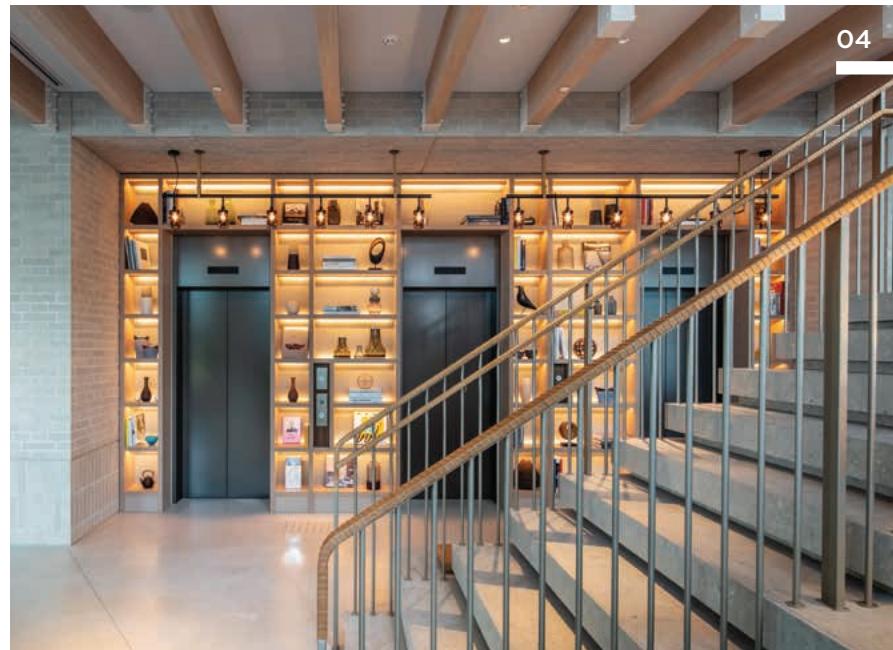
03





03. Stone, subtly inspired by Osaka Castle, was used for the sculptural staircase and concierge desk.

04. Open shelves with decorative objects give the lift foyer a homely appearance.



The architectural brief was for a city hotel with the look, feel and quality of an upscale, urban residence fringed with green spaces.

The total area allocated for the hotel programme was already pre-determined based on city regulations and the brief from the property's developer, Kanden Realty & Development.

Kajima Design was hired to incorporate the desired facility allocations and floor distributions requested by the property's leasee, Palace Hotel Management.

A STRUCTURED, GRID DESIGN

Kouichiro Shiomi, Group Leader at Kajima Design says, "Zentis Osaka's architectural design pays homage to the hotel's immediate location.

"The hotel borders the business district of Dojimahama, so we chose a grid design for the building's exterior as a nod to the very structured nature of business.

"The brick and glass façade on the first two levels complement and accentuate the abundant green space surrounding the building."

Shiomi and his team came up with a cloister-corridor type layout for the guestrooms floors, "This allows the flow of all activities to converge at the centre of each floor and for vertical routes such as lifts and stairs as well as various M&E components to be contained in this centre core.

"This layout also made it possible for all four sides of the building's façade to have an identical look."



The Kajima Design team also took into account feedback and recommendations shared by Tara Bernerd & Partners, particularly suggestions about the architectural elements of the lower portion of the building's exterior because it was imperative for the two teams to work together to establish a seamless, natural flow between the interior and the exterior spaces.

Tara Bernerd, eponymous founder of her firm, says, "We worked closely with Kajima Design to set back the façade of the building, to create a seamless link between the garden and the interior of the hotel."

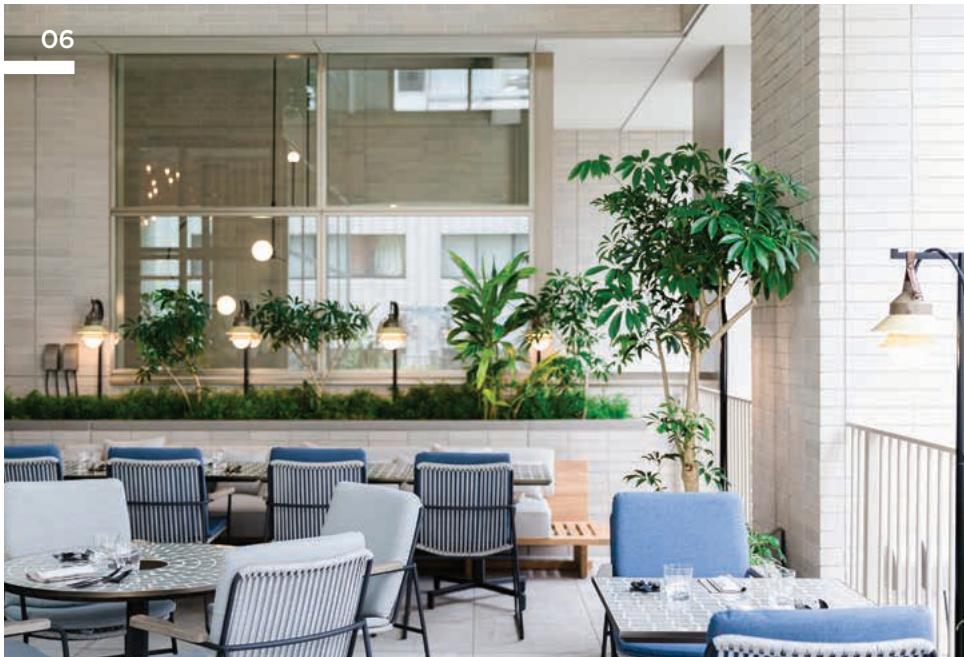
"Floor-to-ceiling windows on both the ground and first floors help establish this connection, while the outdoor terrace on the first floor provides easy access to the garden from the bar."

Bernerd and her team worked closely with the client and Kajima Design to maximise the benefit of the building's unique garden site, which is a rarity given its downtown location.

"The floor-to-ceiling windows in the public spaces emphasise the interplay with the outdoors, which was a pleasure to work with in our layouts and design," she says.

05. UPSTAIRZ,
the hotel's only
F&B outlet,
includes a
dining, bar and
lounge area with
striking pendant
lighting.

06



07



ZENTIS OSAKA	
LOCATION	Osaka, Japan
COMPLETION	2020
BUILDING AREA	12,136m ²
HOTEL GROSS FLOOR AREA	9,153m ²
ARCHITECT	Kajima Design
INTERIOR DESIGN	Tara Bernerd & Partners
DEVELOPER	Kanden Realty & Development
HOTEL MANAGEMENT COMPANY	Palace Hotel Management Co. Ltd.
CONTRACTOR	Kajima Corporation
LANDSCAPE DESIGN	Media For Space

LUXURY WITH AN INDUSTRIAL EDGE

Bernerd – who is known for her hospitality projects that are approachably luxurious with an industrial edge – wove elements of Osaka's identity as a city into the hotel's interior design concept.

"From my very first visit to Osaka, I found the city to be a really intriguing. Osaka has a strong historical heritage but is also modern, vibrant and colourful."

"Craftsmanship and industrial heritage are key to the local culture and we have

sought to encapsulate both with a modern, forward-looking attitude through a mixture of materials from local brick to beautiful timbers and encaustic tiles," she says.

In the reception lounge, stone, which was subtly inspired by Osaka Castle, was used to create the sculptural staircase and concierge desk.

Locally sourced bricks were used to reference the area's industrial heritage, and these harmonise well with the encaustic tile inlaid floor in the centre of the lounge.

When designing UPSTAIRZ, which is

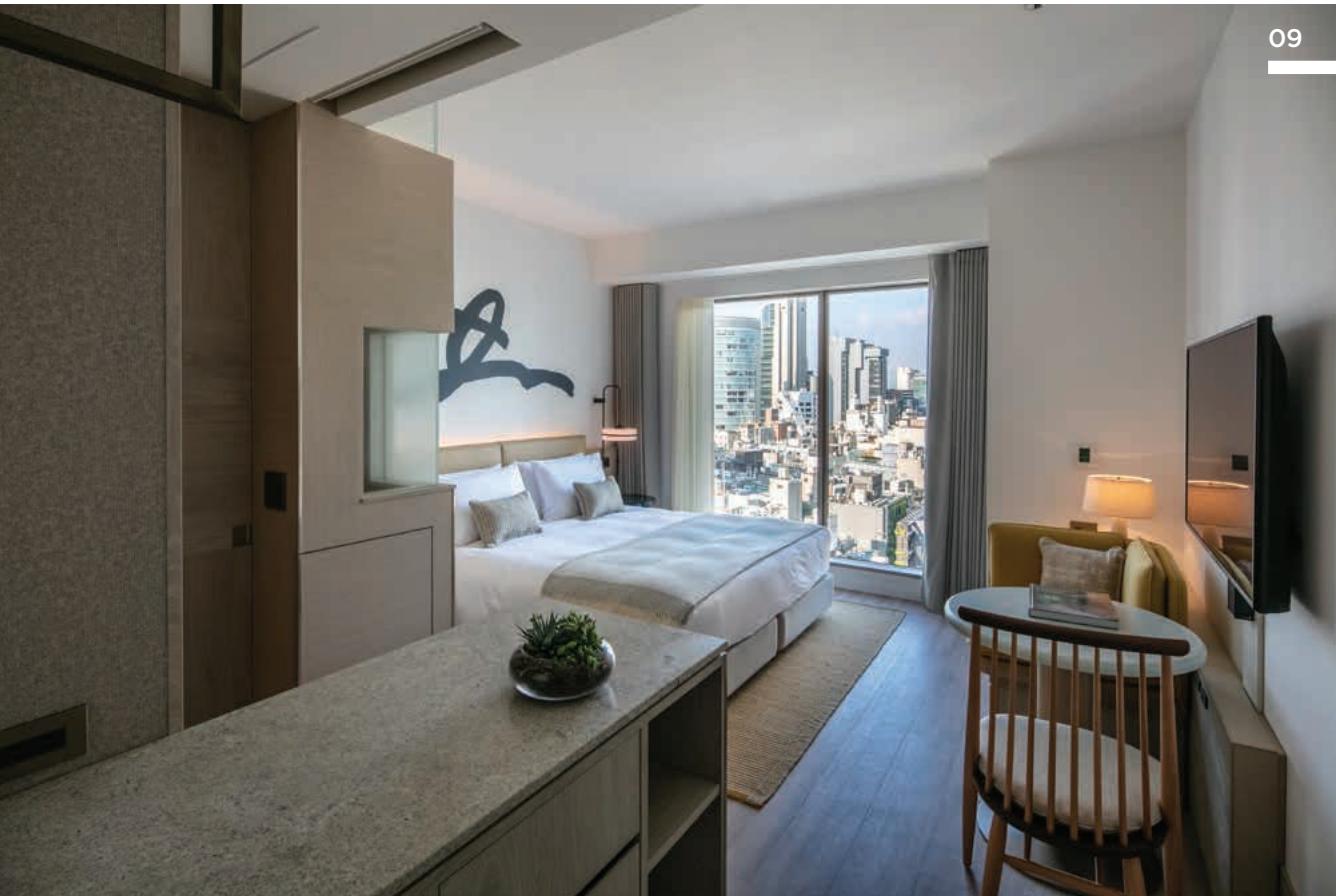
06. The semi-outdoor dining area of UPSTAIRZ is fringed with greenery.

07. Encaustic tiles were used for the floors of the public areas, contrasting against the mosaic of the table tops.

08



09



08. An outdoor terrace on the first floor provides easy access to the garden from the bar, itself a demonstration of Bernerd's style of approachable luxury with an industrial edge.

/
09-10. A bento box-style layout optimises functionality in the guestrooms, which were designed as practical and relaxing sanctuaries.

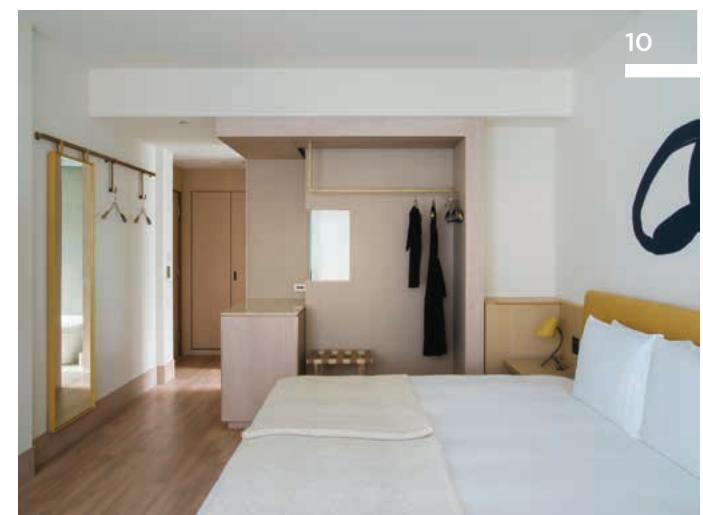
located one floor up from the entrance, Bernerd made the bar the focal point of the double height space by including fluted tiles from a local Japanese company on the front of the bar.

For the private dining room within the restaurant, she and her team used linen-inlaid glass privacy screens as an ode to traditional Japanese *shoji* screens.

In response to the compact size and scale of the guestrooms, Bernerd maximised the functionality and usage of space by developing the guestrooms like traditional Japanese bento boxes with interlocking layouts.

This helped optimise the limited floorplate and create a functional yet inviting sanctuary for guests. Traditional art on *washi* paper made by local artists adorn the guestrooms and public areas.

"It truly was a privilege to work with such an enthusiastic, professional and affable client and architects.



"There were relatively few challenges on this project as we had a great synergy with the client, who was very open to our design ideas and keen to adhere to timelines.

"The whole design process was extremely positive," says Bernerd.

TROPICAL REVIVAL

INCORPORATING FEATURES FROM TROPICAL ARCHITECTURE, SINGAPORE PRACTICE VERSIFY STUDIO TRANSFORMED THIS APARTMENT INTO A COMMODIOUS, BRIGHT AND WELL-VENTILATED “HOUSE IN THE SKY”.

WORDS
MICHELE KOH
MOROLLO

PHOTOGRAPHY
VIVIAN JOHNNY
AND ALAN LAU

01. A verandah along the eastern aspect of the building overlooks a courtyard garden.

02. The three bedrooms on the upper level have windows that enable its residents to look down at the west- and east-facing verandahs, and out to garden or river views.





Upon returning home to Singapore after a stint at OMA in Hong Kong, architect Alan Lau, co-founder of Versify Studio, noticed that Singapore's built landscape was heavily influenced by architecture from non-tropical regions.

When he and his business partner architect Vivian Johnny were commissioned to refurbish a 36-year-old, two-storey maisonette in Potong Pasir, they saw it as an opportunity to apply tropical living design principles to

enhance the look and feel of the space.

"When I came back to Singapore, I worked in an office with 180-degree views of Marina Bay, but the glare from the sun prevented me from enjoying that view," recalls Lau.

"Looking at the city skyline, I noticed that every tower built after The Sail@Marina Bay had glassed-up facades.

"Cities and towns used to have distinct architectural characteristics that responded to their local climates and cultures. Now

03



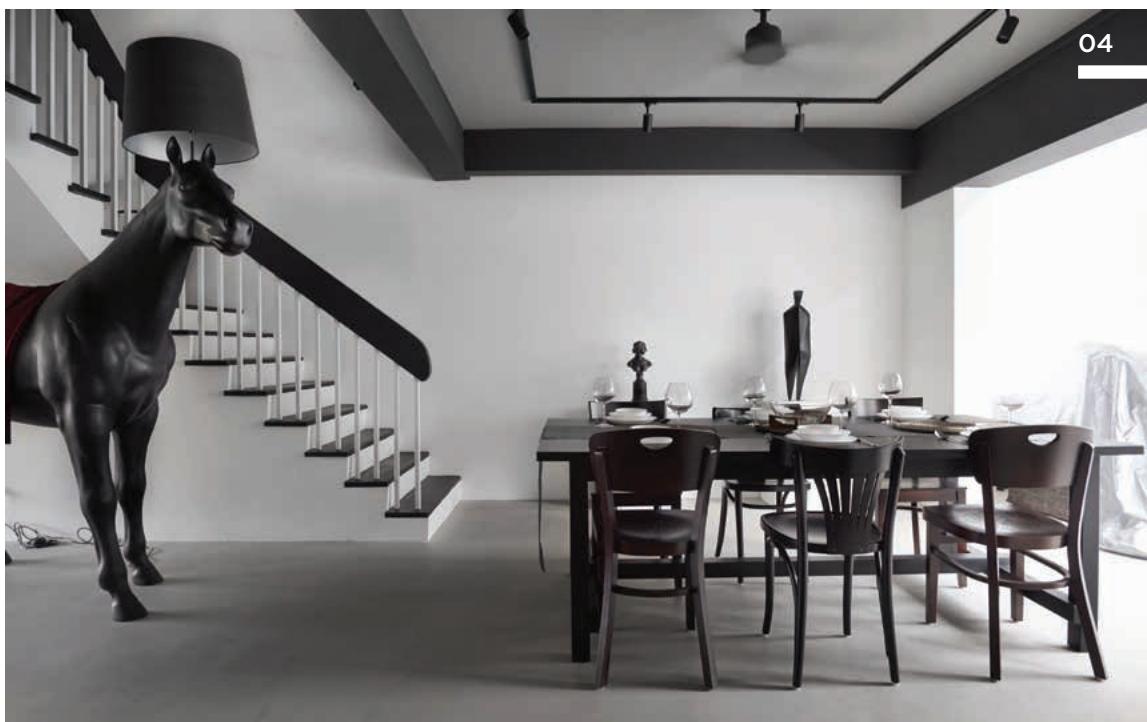
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In the last two decades, glass towers have become the norm for new-builds in Singapore.

It seems we architects have all forgotten how to design spaces that are appropriate for our tropical climate.

”

04



03-04. The dining area is seamlessly connected to the living area and kitchen, separated by the iconic Horse Lamp by designer Front from Moooi.

however, many cities look like what Rem Koolhaas refers to as 'the generic city'."

Johnny concurs, adding, "In the last two decades, glass towers have become the norm for new-builds in Singapore.

"It seems we architects have all forgotten how to design spaces that are appropriate for our tropical climate."

To prepare for the project, the duo visited and studied old colonial-era buildings in Singapore and other Southeast Asian countries, measuring the temperature, wind speed and lighting level within those spaces.

When they compared measurements obtained from these heritage buildings with measurements obtained from the



original Potong Pasir apartment, they were surprised by how dramatic the differences were.

They discovered that tropical-style, heritage buildings included passive cooling features – notably verandahs along the periphery of the buildings – that encourage better air circulation within the interiors.

This meant that 100 years ago, people could live comfortably in Singapore's hot and humid tropical climate without air conditioning.

Other features they saw in the old buildings included permeable façades,

clerestory windows and light-coloured walls and ceilings.

Employing elements from tropical architecture, they turned the Potong Pasir maisonette into a 165m² home with a layout that is as spacious and lofty as a stand-alone house.

OPENING UP

The pair started by removing all the original walls and sliding doors along the balcony and corridors of the unit, as well as the façade windows to create two semi-outdoor verandah spaces.

The kitchen wall was replaced with

05. A monochromatic colour scheme increases the multi-functionality of the living areas.

06



sliding glass doors to establish better visual connectivity between the kitchen and the living and dining area.

"We used subtraction as a strategy for the design of the house, removing unnecessary walls and windows to help increase natural ventilation and bring daylight deep into the spaces," says Johnny.

"Windows were removed to transform enclosed corridors and balconies into semi-outdoor verandahs, where one is protected but never separated from the outside."

The remaining windows and doors were replaced with bi-fold windows and doors to maximise ventilation and light penetration.

On the lower level is a study room. Adjacent to it is the kitchen, which is connected to an expansive, cross-ventilated, open-plan living and dining area via the sliding glass door.

On the western aspect of this social zone is a verandah that looks out to the Kallang River. On the eastern aspect, is another verandah which overlooks a

06. A bar counter on the west-facing verandah looks out to the Kallang River.

07. From the open-plan dining area, a double-volume atrium with a staircase leads up to the bedrooms.



ALAN LAU,
VIVIAN JOHNNY,
ARCHITECTS,
VERSIFY STUDIO

courtyard garden.

Between the living and dining areas is a double-volume atrium with a staircase that leads up to the private rest zone.

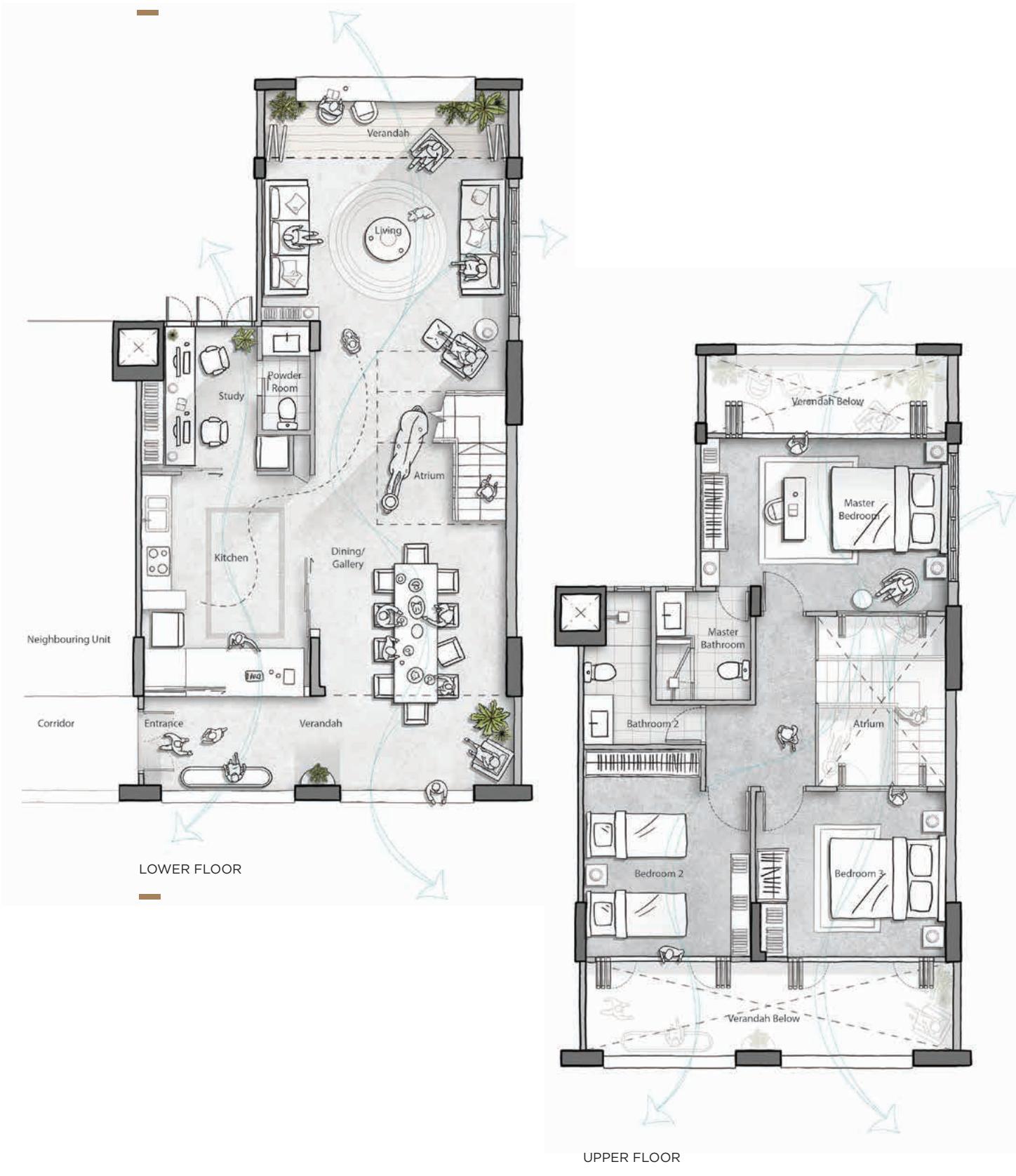
Lau and Johnny designed the three bedrooms on this upper level with windows that enable users to look down at the west-and east-facing verandahs, as well as across them – through large apertures along the upper wall – to outdoor views.

HOUSE IN THE SKY

A monochromatic colour scheme allows for increased adaptability, so the living



FLOOR PLANS





08



ENJOYED READING ABOUT THE INTERIORS OF THIS MODERNIST PROJECT? SCAN THE QR CODE TO VISIT OUR WEBSITE FOR OTHER STORIES ON MODERNIST BUILDINGS IN SINGAPORE AND WHY THEY SHOULD BE CONSERVED.



09

HOUSE IN THE SKY

LOCATION

Singapore

COMPLETION

2020

GROSS FLOOR AREA

165m²

INTERIOR DESIGN

Versify Studio

LEAD DESIGNERS

Vivian Johnny and Alan Lau

DESIGNER FURNITURE BRANDS

Louis Poulsen, Mooo!, Fameg, Vitra

areas can be used for various functions, such as a tea party or art gallery if the owners so choose.

The walls and underbelly of the house were painted grey, and modern furniture from Louis Poulsen, Mooo!, Fameg and Vitra were used to create a sleek, minimalist décor concept.

Dark-coloured beams were used to create the illusion of an uplifted "house in the sky".

"We were working with an unfurnished, 36-year-old apartment where the built elements weren't properly aligned or were starting to deteriorate," Lau says.

"So even though the apartment was a modernist building, it felt as if we were working on a preservation project."

"We had to be on site almost daily to supervise and address multiple unforeseen issues. We paid special attention to proportions and ensured they were followed. At times, we had to recalculate to ensure that our design intentions were achieved."

One major benefit of the renovation is that the cost of the electricity bills from air-

conditioning have been halved, because the maisonette's indoor temperature is now about two degrees lower than the temperature in neighbouring units in the same estate.

Clearly all that effort by the duo into research has paid off and this project deserves to be considered a residential model for tropical living.

08-09. All the bedrooms on the upper level have generously sized windows that frame the views outside of the apartment.