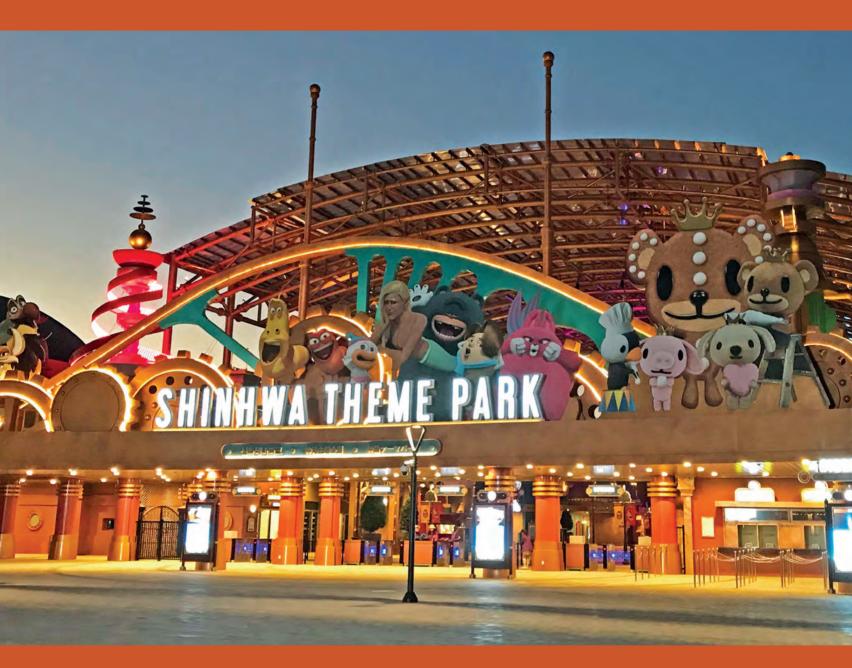
May / June 2020





Jeju Shinhwa Theme Park

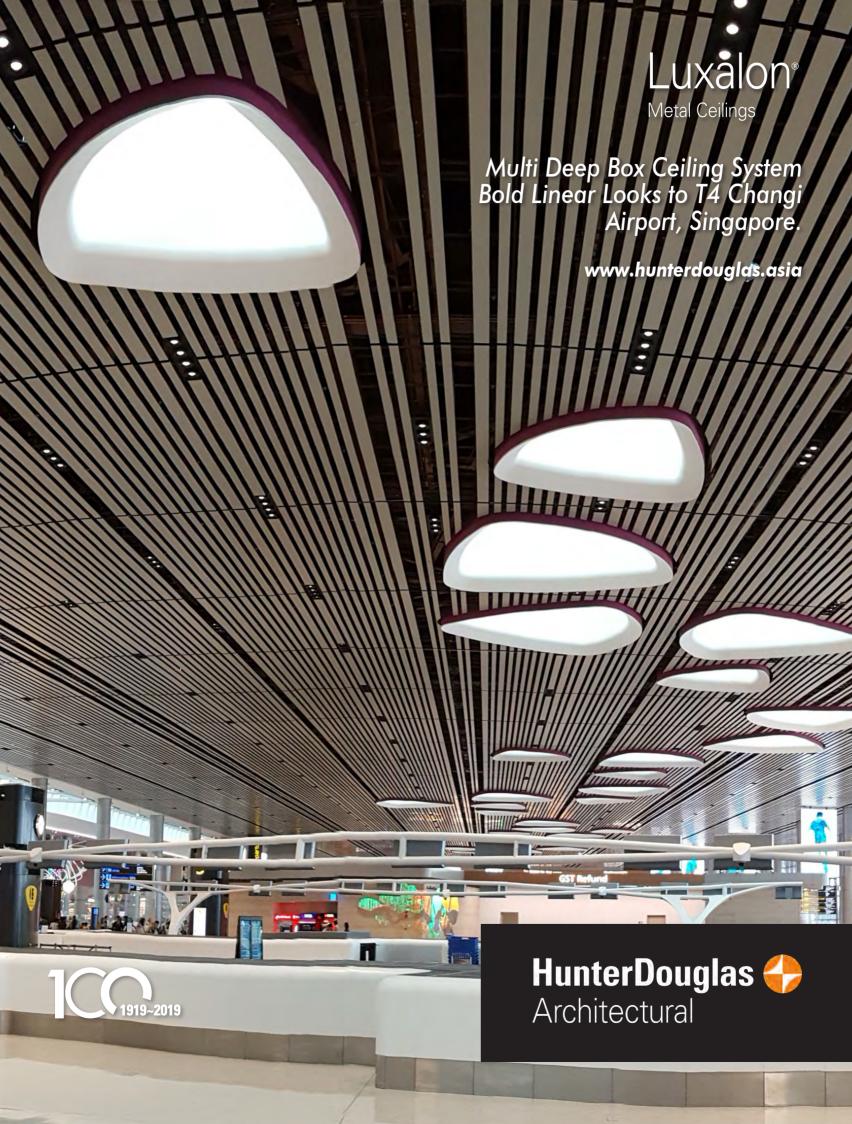
Jeju Island, South Korea

PROJECTS Theme Parks
TRENDS Playground Equipment
ARCHITECT'S CORNER Interviews with Mapei & SAA Architects
PLUS Impact of COVID-19 on architecture & engineering firms and flexible workplace operators like Arcc Spaces



High level of functionality and attractive appearance





may-june 2020

Features

NEWS FEATURE

38 Zishe Planting Pavilion and **Planting Terrace**

PROJECTS - Theme Parks

- 40 Jeju Shinhwa Theme Park
- 46 Pushkin Theme Park
- 50 Nickelodeon Universe
- 52 Kim Quy

TRENDS - Playground **Equipment**

- 54 Custom Playgrounds versus Proprietary (Catalogued) Playgrounds - An article by Patrick Lee, Director, CT-Art Creation Pte Ltd
- 56 Product stories from Ropecamp and Playpoint
- 57 Product stories from ID Sculpture and Retro-Max

ARCHITECT'S CORNER -Interview

- 60 Installing large format tiles - An interview with Marco Albelice of Mapei SpA Technical Services Department
- 62 SAA Architects (SAA) clinched a Silver award in the healthcare category at the World Architecture News (WAN) Awards 2019

- for St. Joseph's Home (StJH) located in Singapore
- 68 Maria Nakamura of Arcc Spaces tells us how they are dealing with the COVID-19 outbreak
- 70 How architecture and engineering firms are responding to COVID-19 outbreak

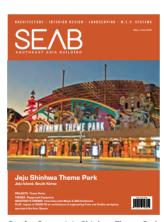
Regulars

NEWS

News from Asia Pacific. Middle East & the World

EVENTS CALENDAR

79 Guide to international trade shows, expos & fairs



On the Cover: Jeju Shinhwa Theme Park in Jeju Island, South Korea. Photo: © IRMS

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ello readers and welcome to another issue of Southeast Building. Currently, the world is facing the worst health crisis in the world and the mood everywhere is gloomy and panicky.

We hope that you are keeping safe and we are also taking precautions against COVID-19.

In this issue, we have lined up a few interviews with architects, engineers and even a flexible workplace operator to share with us how they are responding to the COVID-19 outbreak through various measures and what impact will it have on the architecture, construction and engineering industry as a whole.

Companies with ongoing construction works in the COVID-19 affected countries have been affected by a slow down. But hopefully they will bounce back and we will showcase their projects again.

Also in this issue, we bring you some theme parks projects, which are thrilling and fun and even innovative because of the use of technology and immersive attractions. If you are an architect or landscape architect who wants to specify a playground equipment for your project, you can check out some products in the Trends section.

We hope you enjoy reading it and for our past issues, you can visit our website. Take care and stay safe.

Amita Natverlal

NEXT ISSUE THEMES

- Projects Commercial
- Trends Façade System & Architectural Glass
- · M.E.P. Systems (refer to media kit)
- Advertorial 3D Printing













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iation of Myanmar Architects

Bangladesh Green Building Council

Design Council - Sri Lanka







Foundation for Futuristic Cities



Green Building Committee BEI MYANMAR



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Green Building Council Italia



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Green Building Council Sri Lanka



Hong Kong Green Building Council







Jordan Green Building Council



Qatar Green Building Council





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CapitaLand installs solar farms atop six properties in Singapore to generate over 10,000 megawatt hours of energy annually

Singapore - CapitaLand partnered with Sembcorp Industries to install about 21,240 rooftop solar panels atop six CapitaLand properties in 2019. The installation formed the largest combined rooftop solar facility in Singapore by a real estate company. These solar farms can collectively generate around 10,292 megawatt hours of energy annually, equivalent to powering about 2,300 four-room Housing & Development Board (HDB) flats each year¹. The six CapitaLand properties that installed the solar panels are 1 Changi Business Park Avenue 1, 9 Changi South Street 3, 2 Senoko South Road, 40 Penjuru Lane, Techpoint and LogisTech. The properties are held under CapitaLand's business space and industrial real estate investment trust (Reit), Ascendas Reit.

The energy generated through this renewable source will significantly lower

CapitaLand's carbon footprint. The combined rooftop solar facility will avoid over 4.3 million kg² of carbon emissions each year. These latest efforts will also bring the Group closer to its new sustainability targets to generate at least 20 percent energy consumption from renewable energy for its enlarged global portfolio by 2025. Furthermore, there is no installation cost incurred by the Group, making this initiative a good business case for sustainability.



Capital Tower. Photo: © CapitaLand



Techpoint. Photo: © CapitaLand

Ms Lynette Leong, Chief Sustainability Officer for CapitaLand Group, said: "CapitaLand is committed to growing our business in a sustainable manner, and this initiative is an example that sustainability can create value-add propositions. Following CapitaLand's recent integration with Ascendas-Singbridge, we can now leverage a wider network of properties to contribute meaningfully towards sustainability. We are also exploring the use of Renewable Energy Certificates resulting from the excess energy generated by the solar panels installed at the six properties to offset carbon emissions from CapitaLand's corporate operations at its Singapore headquarters in Capital Tower and Galaxis. We will further review opportunities within our enlarged global portfolio to deploy clean energy technologies to power our real estate operations."

In India, rooftop solar panels have also been installed across 17 buildings in International Tech Park in Bangalore, International Tech Park Chennai and Cybervale IT Park in Chennai. Collectively, the panels can generate over 2,750 megawatts hours of energy on a yearly basis and has resulted in an estimated reduction of close to 1.95 million kg in carbon emissions annually. In Singapore, the Ascott Centre for Excellence, the global hospitality training centre of CapitaLand's lodging business, purchases electricity generated from renewable sources. The training centre is currently 100 percent powered by renewable energy.

¹ Average annual consumption of a four-room HDB household is based on Singapore's Energy Market Authority's (EMA) 2018 Singapore Energy Statistics – Page 34.



Kagi Maldives Spa Island to open in July 2020

Singapore – The five-star Kagi Maldives Spa Island will launch in the Maldives' North Male Atoll in July 2020. The boutique 50-villa property will provide couples, friends and solo travellers with a 360° wellness experience, just a 15-minute seaplane or 60-minute speedboat ride from Velana International Airport.

Kagi has partnered with esteemed architect Yuji Yamazaki on the design of the resort. At the heart of the island will sit Kagi's 1,500-square-metre spa and wellness hub, complete with an open-air, teardrop-shaped floating yoga pavilion at its centre. Kagi will also house a state-of-the-art gym, two restaurants, three bars, a dive centre and a house reef.

Guests will be able to choose from three room types, a Beach Pool Villa, a Lagoon Pool Villa or an Ocean Pool Villa, all of which will be distinguished by their unique locations and will house a private pool, a sun deck and an expansive indoor-outdoor bathroom.

Positioned at the lagoon of the island, Kagi's Baani Spa will offer a personalised, outcome-focused wellness programme that will take guests on a journey to Release, Restore and Regain.

A fully integrated wellness centre, the spa will consist of four treatment rooms with outdoor bathing facilities, a relaxation lounge, beauty salon, fully-equipped yoga and sound-healing studio, steam rooms and a spa wellness boutique. A 'Spa Corner' will raise the 'juice' bar with superfoods and ingredients rich in vitamins, minerals and antioxidants, offering a variety of drinks



Photo: © Kagi Maldives Spa Island

that are as delicious as they are energising and nutritious.

For those looking to improve their fitness, a state-of-the-art gym, tai chi, qigong, yoga and Pilates will all be on offer, with a rotation of visiting expert practitioners providing dedicated retreats.

The more adventurous will also have a chance to sample a variety of watersports including day-and-night snorkelling, scuba diving, catamaran and sailing boat trips, and much more. Kagi will house two restaurants, three bars and an expansive wine cellar.

Four Seasons Hotel Bangkok at Chao Phraya River opens in early 2020

Singapore — Designed by award-winning architectural and interior design legend Jean-Michel Gathy, Four Seasons Hotel Bangkok at Chao Phraya River is now accepting reservations for arrivals beginning early 2020. Jean-Michel Gathy, the mastermind behind the new spectacular riverfront hotel in the capital of Thailand, reveals his definitive interpretation to the interior and landscape design of the hotel — the dominance of water features blending successive indoor and outdoor spaces and integrating elegant touches of Thai influence throughout the design delivery.

Occupying 200 metres of pristine river



frontage, exceptional design immerses focus into the natural riverfront landscape. Four Seasons Hotel Bangkok at Chao Phraya River provides a unique environment for a superlative sensory quest experience within the environs of a luxury urban resort. The hotel will also introduce modern meeting and function spaces, including a riverfront Grand Ballroom with expansive outdoor terrace; and world-class entertainment offerings along the hotel's waterfront promenade featuring an array of restaurants and bars.

"The core challenge that drew me to this extraordinary project was the chance to craft the ultimate urban resort

experience and at the same time to create an incomparable city hotel that would not only complement but also enhance its unique, expansive riverside location," commented Jean-Michel Gathy, founder and principle designer at the multipleaward winning firm Denniston.

Four Seasons Hotel Bangkok at Chao Phraya River's 299 guest rooms including suites with garden terraces provide a warm and sophisticated welcome with their contemporary interiors and hand-selected furnishings, which combine with abundant natural light to provide a genuine sense of place along Bangkok's riverfront.

Architect Karim Nader unveils photographs of new house under construction on a uniquely beautiful but challenging site in Lebanon

Saifi, Beirut - Karim Nader Studio has released new photos showcasing the ongoing construction progress of On The Rocks, a spectacular concrete and glass retreat sitting on the limestone bedrock of Fagra, Lebanon, at 1,700 metres above sea level. The site, characterised by an almost lunar landscape with scenic rock formations known under the popular name of "houses of ghosts," is located between ski slopes and Roman ruins on Mount Lebanon, about 1-hour drive northeast of Beirut. On-site construction is entering the homestretch, completion slated for late 2020.

The small town of Faqra might be most famous for its majestic archaeological site, the most extensive of all Mount Lebanon with Roman and Byzantine ruins, and its skiing facilities. Once there, one cannot but be amazed by its limestone landscape, with natural rock formations carved over the centuries by rain and snow. It is here that Karim Nader Studio has designed a new, spectacular retreat residence, deeply inspired and reminiscent of its surroundings.

By carefully considering materiality and relationship to the site, the house - due for completion in late 2020 expands the existing grey canvas of the natural surroundings into manmade fair-faced concrete volumes that accommodate the intimate functions of the house.



Photo by Marwan Harmouche

The house is accessed by a stunning floating staircase that, cascading between the built volumes and meandering around the rocks, seems to be almost emerging from the limestone formations surrounding the house. The thickness and the overall sense of compactness offered by the concrete enclosures is counterbalanced by a careful use of glass in a dynamic relationship that characterises all rooms in the house. A zinc roof hovers above those apparently dispersed boxes, creating a seeming enclosure.

"But where roof happens, enclosure disappears, and where enclosure happens, roof disappears. The intimacy of enclosure is here opposed to the openness of an extreme transparency as they do not happen at once in this atypical house," said Karim Nader.

Each of the three bedrooms, fully cladded in wood to offer a warm environment, opens up to a small patio with a tree, a rock and a selected perspective to the outside. The living rooms sit under the bridging roof (18 metres in length) and are bounded by fully operable facades to the north and south, allowing its inhabitants to enjoy sheltered outdoors space in the warmer months.

The View at The Palm takes recreation and leisure to new heights

Dubai, UAE — Master developer Nakheel is adding another stunning, landmark attraction to Dubai's recreation and leisure scene with 'The View at The Palm', a public observation deck towering 240 metres above the world-famous Palm Jumeirah. Accessible from Nakheel Mall, which opened in November 2019, the observatory will offer spectacular, uninterrupted views of The Palm, the Arabian Gulf and the Dubai skyline, and reveal the incredible story behind the making of the island that put Dubai on the global map.

The View at The Palm is perched on the top level, 52nd floor of The Palm Tower, at the heart of the island. The observation



View from The View at the Palm Jumeirah. Photo: $\ensuremath{\texttt{©}}$ Nakheel

deck, which includes a VIP lounge and areas for private events, is nearing completion.

Omar Khoory, Managing Director of Nakheel Malls, which will operate the attraction, said: "The View at The Palm will combine awe-inspiring, breath-taking views with an interactive, educational experience about the creation of the iconic Palm Jumeirah. This stunning new attraction — the only location in Dubai offering this unique experience — will be a magnet for residents and tourists."

Visitors to The View will start their journey at the roof plaza of Nakheel Mall, where they will find an interactive museum and gallery dedicated to the creation of Palm Jumeirah. From there, an elevator, complete with a floor-to-ceiling digital sea, sand and sky experience, will take them on the three minute ascent to the observatory at the top of The Palm Tower, where they can marvel at the island beneath them, and enjoy 360 degree views of Dubai.

Once visitors have come back down to earth, they can refuel at The View café or browse the gift shop at the Nakheel Mall roof plaza. Visitors to The View will be able to buy tickets online, by phone or in person at the Nakheel Mall roof plaza, for a day or night experience.

The Palm Tower, Nakheel's stunning new landmark for Dubai, comprises a St. Regis hotel and luxury residences, with a rooftop infinity pool and restaurant underneath the viewing deck.

With its own Palm Monorail station, the tower is directly connected to Nakheel Mall, and its 300 shops, restaurants and attractions.

OMA's first hotel in Bali completes

Bali, Indonesia — Potato Head Studios, designed by OMA / David Gianotten and commissioned by Potato Head, completes in Seminyak, Bali. OMA's first hotel dedicated not only to guests but also the local community, the Potato Head Studios features an open ground plane for curated cultural events and daily leisure activities, which welcomes visitors of all kinds.

"The essence of Bali lies in interaction between different cultures. Our design for the Potato Head Studios offers both private guestrooms and facilities, and public spaces to encourage exchange between different kinds of users. It challenges the typical Balinese resort typology that highlights exclusivity," said David Gianotten, Managing Partner – Architect.

In the Potato Head Studios, a floating ring lifted by pilotis accommodates the private guestrooms and other functions, including an exhibition space



Photography by Kevin Mak. Image courtesy of OMA.

and a sunset bar. This has resulted in an open cultural ground plane — or an open platform — which leads to the beach. This is a flexible stage for a range of programmes, such as festival celebrations, cultural events, and day-to-day leisure activities that welcomes everyone to experience Balinese contemporary culture. At the roof top is a sculptural park open to public, accessible via a public route that connects amenity spaces including restaurants, pools and spas.

The Potato Head Studios was designed with the Indonesian context in mind. The open platform at the ground level and a private garden on the second level evoke the raised courtyards in Indonesia, and traditional Balinese courtyards found at the ground level.

Textures of some concrete walls were created by local craftsmen, while the façade design of the guestroom corridors was inspired by *Balinese Tika*, or divination calendar.

CapitaLand wins tender for integrated management of Bugis Village and Bugis Street

Singapore – CapitaLand has won the joint tender by the Singapore Land Authority (SLA), Singapore Tourism Board (STB) and Urban Redevelopment Authority (URA) to appoint a single operator for the integrated management of Bugis Village and Bugis Street, which has a proposed retail net lettable area of about 195,000 square feet.

The bid was evaluated using the Price-Quality Method, which took into consideration the quality of the proposal in enhancing the vibrancy of the Bras Basah.Bugis precinct, price and the bidder's experience and track record, among other criteria. Commencing on 1 April 2020, the award has an initial tenancy term of 3 years, which may be renewed for a further two tenancy terms of 3 years each, and a final tenancy term not extending beyond 30 March 2030. Existing tenants at Bugis Village and Bugis Street may continue business operations under CapitaLand for a year at the prevailing rent, until 31 March 2021.

The integrated Bugis Village and Bugis Street is located next to Bugis+ and opposite Bugis Junction, both established malls under the CapitaLand Group and linked to Bugis MRT Interchange Station serving the East-West and Downtown Lines. To enhance the connectivity of Bugis Village and Bugis Street, CapitaLand is exploring a new link bridge connecting Bugis Street to Bugis+ to provide visitors with seamless sheltered access from Bugis MRT station. Leveraging CapitaLand's retail stronghold in Bugis, plans are



Photo: © CapitaLand and FARM Architects.

being explored for the integrated Bugis Village and Bugis Street to house retail concepts1 that complement existing offerings in the area. These include day-to-night market, retail incubator and shared economy spaces such as coliving and coworking areas.

Mr Ronald Tay, CEO of CapitaLand Singapore, Malaysia & Indonesia, Residential & Retail, said: "Our bid for the integrated management of Bugis Village and Bugis Street is in line with CapitaLand's precinct strategy to rejuvenate and maximise synergy in areas where we have an existing network and competitive advantage."

A section of the revamped Bugis Village and Bugis Street will be turned into a hub converging experiential retail, social experimentation and local entrepreneurship, offering established brands and new entrants an incubator space to innovate new ways of creating curated brand experiences or pilot new concepts. The retail incubator will diversify offerings for shoppers and complement the current retail mix at Bugis Junction and Bugis+.

Over the years, Bugis Street has gained popularity with both locals and tourists as "the largest street-shopping location in Singapore". To add on to the retail experience, a series of loose and colourful container boxes with open display areas will be introduced. This is a modern interpretation of street markets where tourists and shoppers enjoy memorable encounters with trendy Instagrammable bites, quirky gifts and trending fashion accessories.

Sudamala Resorts appoints ESA International to craft its latest authentic Indonesian beachfront retreat

Bali, Indonesia – Sudamala Resorts, the art-inspired Indonesian boutique resort company, has appointed award-winning architecture studio ESA International to create its latest barefoot beachfront retreat, Sudamala Suites & Villas, Komodo, Labuan Bajo.

Scheduled to start welcoming guests in Q2 2020, Sudamala Suites & Villas, Komodo will blend seamlessly into its stunning surroundings, on the spectacular west coast of Flores, East Nusa Tenggara. The resort's sensitive design will reflect the classical architectural style of this ancient region, with a concept that showcases traditional building techniques, local materials, authentic art and natural fabrics.

Facing the beach and blessed with breathtaking views of the Labuan Bajo Strait, the resort exudes a deep sense of calm and freedom. It respects local wisdom and captures the spirit of the island, while helping to preserve the environment. Native trees have been preserved to encourage wildlife, provide shade and ensure a wonderfully tranquil ambience.



Sudamala Suites & Villas Komodo Sea View Suite, Photo: © Sudamala Resorts

The 68 suites and 16 villas reveals rustic beach-chic interiors combined with contemporary comforts and modern technology. The Garden Suites promise private balconies overlooking the lush landscape, while the Beachfront and Sea View Suites command exceptional views of the Labuan Bajo Strait, and the luxurious Private Pool Villas provide expansive courtyards, alfresco pavilions and inviting outdoor pools. The restaurant

allows guests to dine in nature, kissed by the gentle sea breeze, while the serene Sudajiva Spa features four double treatment rooms and a soothing spa pool, and the fitness centre houses the latest equipment. Alternatively, guests can plunge into the seafront swimming pool, explore the underwater world from Aqura Dive, which has its own training pool, or simply slip off their shoes and stroll along the soft sandy beach.

Wilson Associates designs exceptional new five-star hotel in Zhuhai

Singapore – International interiors firm Wilson Associates has shared the official design of the St. Regis Hotel Zhuhai. Overlooking the waterfront of Wanzai from the top of the iconic Zhuhai Tower, the new five-star property was designed by Wilson Associates' Singapore studio to bring the grandeur of the first Astor House to China's emerging Guangdong Province Riviera. Recalling the European Classical inspirations of the Astor aesthetic, this breathtaking destination boasts 251 stunning guest rooms and suites, a host of fine-dining selections, and over 1500 square metres of grand public spaces, as well as a state-of-the-art spa and athletic club.

"In an age where even the most high-end hotels are designed to follow contemporary trends, our inventive team sought to creatively challenge what we've come to expect of luxury," said Soong In Hui, senior design manager in Wilson Associates'



St. Regis suite - living room. Photo: © St. Regis and St. Regis Zhuhai

Singapore studio. "Serving as both designers and historians, we were committed to honouring the legacy of the Astor family, underscoring a firm adherence to a stylistic tradition not normally found in this part of the world."

Recognised for its familiar Beaux-Arts interior vocabulary, St. Regis' spectacular 31-storey outpost in Zhuhai cleverly translates the language of luxury into a distinct hospitality experience, unique to New York City circa 19th century. Each guest's arrival is hallmarked by signature standards of the St. Regis brand – bold colour palettes, imported fresh flowers, and door-to-door butler service. The lobby's soft marble interiors draw the eye upward to a massive, glittering chandelier, of which there are over 500 of varying sizes throughout the hotel,

hung from an ornately crafted ceiling.

As visitors continue to explore the hotel's lavishly-adorned interiors, full-height glazing around every corner capitalises on sweeping views of the South China Sea and the city lights of nearby Macau. Marrying the European styling with the local culture, Wilson Associates' design team curated an art programme that journeys guests from the early beginnings of Zhuhai as a shipping port to the region's modern-day activities. This narrative is exemplified through eye-catching murals and custom landscape oil paintings — each piece depicting the locale through history while utilising Western oil painting techniques — as well as dazzling collections of cut-crystal sculptures and antique artifacts.

Emaar to build first 3D printed home in Dubai's Arabian Ranches III

Dubai, UAE — Setting a new milestone in residential property development, global real estate developer Emaar Properties has announced plans to build its first 3D printed home in Dubai. This is the first step towards Emaar's ambition to be a leading adopter of advanced construction technologies.

Following a global competition, in which the world's leading 3D printing technology providers participated, Emaar has awarded the contract to 3D print a model home in Arabian Ranches III. The construction will be facilitated using a local contractor with the goal of building in-country competencies in 3D printing for the property sector.

Building the first 3D printed model home underlines Emaar's commitment to adopt innovative construction methods to build faster and at a lower cost while achieving higher design and architectural flexibility. Emaar's use of 3D printing technology will also promote the sustainable use of resources by reducing waste of construction materials and noise pollution.

Upon completion, the 3D printed model home will serve as a reference point for investors to further understand the concept and appreciate the value add that advanced technology brings to the real estate sector.

Mohamed Alabbar, Chairman of Emaar Properties, said: "As the pioneer of integrated communities in Dubai and the trend-setter in the region's property sector, our plans to embrace 3D printing of homes is an integral part of our digital-first and customer-first strategy. Through this, we are not only positioning ourselves as an early adopter of advanced technology but also creating long-term value for our customers as 3D printing brings numerous advantages such as reduced cost of construction, more efficient use of materials and higher levels of sustainability. With 3D printing technology,



Rendering of the 3D printed home. Photo: © Emaar Properties

to be implemented locally using international expertise, we are also supporting the vision of the leadership to build 'Smart and Sustainable Cities' that are tech-driven and meet the aspirations of the new generation of customers. It will also help accelerate the innovation ecosystem in Dubai, inspiring start-ups to contribute towards advanced construction technology."

With this pioneering initiative, Emaar aims to set the region's benchmark in construction best practices as 3D printed homes bring several benefits including accelerated delivery of homes and more flexibility in design. 3D printing is also environment-friendly, with sustainable home construction techniques significantly lowering waste and noise pollution during wall construction. 3D printed homes will contribute to lower cooling costs as customers can choose the thickness and type of insulation that goes into the walls; the thicker the insulation used, the lower the cooling costs.

By embracing 3D printing, Emaar's goal is to create a real estate landscape in the future where customers can 'design, download and print' their homes in the future across Emaar's diverse portfolio of master-planned developments.

Gallant Venture and Obayashi Corporation to build greenhouse optimised for tropical climates on Bintan Island

Singapore – Gallant Venture has partnered Obayashi Corporation to pilot a technologically-advanced eco-tourism focused greenhouse on Bintan island, Indonesia. This was announced at the Joint Development Agreement Signing Ceremony held on 14 January 2020 between the partners. PT Persada Hijau Cemerlang (PHC), a company owned by Gallant Venture and Salim Group, will work with Obayashi Corporation to finetune the latter's pioneering



Artist's impression of the Gallant Obayashi Green Agritech Park. Photo: © Gallant Obayashi Green Agritech Park

technology to build the Gallant Obayashi Green Agritech Park – a greenhouse technology to build the Gallant Obayashi Green Agritech Park – a greenhouse optimised for the tropical climate using advanced environmental controls.

The Gallant Obayashi Green Agritech Park aims to cultivate premium crops with improved sustainability and higher yields. Crops from this urban agri-technology showcase will be commercialised for export to Singapore and beyond. A Visitor and Education Centre for tourists and students is also in the works to promote agri-technology.

The imminent launch of the Bintan Resorts International Airport and the upcoming Bintan-Batam sea bridge is expected to catalyse tourism demand for Bintan island. In response, Bintan Resorts' hotel room inventory is expected to grow five times to 10,000. The Gallant Obayashi Green Agritech Park will further increase the island's appeal as a destination with wide-ranging experiences for different tourists including

families, adventure-seekers, photography enthusiasts, MICE and business travellers, students and more. They will also be able to enjoy farm-to-table culinary experiences while Bintan Resorts becomes more self-sustainable.

The Agritech Park will also be an eco-tour is modest in ation. The Visitor and Education Centre will offer educational tours to deepen the public's knowledge of urban technology-driven cultivation.

Most crops in the Southeast Asian region are grown on open farms. These use a high volume of water. Although current greenhouse technology can boost productivity, conventional structures require constant climate control in tropical climates, making their use costly and unsustainable. This new tropical agritech greenhouse merges Obayashi Corporation's construction expertise with strong agricultural know-how to address these challenges.

The Gallant Obayashi Green Agritech Park will leverage on environmental controls to create optimal growth conditions for Japanese-grade cherry tomatoes and kale. Tapping on Obayashi's technology and experience in understanding plant physiology, the high-tech greenhouse will also utilise heat and air flow analysis. The greenhouse will be equipped with a complex environmental control system that regulates temperature, humidity and light intensity to maximise crop production and quality as well as reduce water usage.

LTW brings celebrated history of Confucianism with timeless opulence at JW Marriott Qufu

Singapore — Award-winning interior design studio LTW Designworks has unveiled the designs for JW Marriott Qufu — a new luxury hotel in Qufu, China, the birthplace of renowned philosopher Confucius. Celebrating ancient heritage with modern elegance, LTW brings forth a timeless design that pays tribute to the deep-rooted ancient traditions and cultures of The Analects.

Sitting adjacent to the Confucius Temple, a UNESCO World Heritage site, the two-storey JW Marriott Qufu stands as an emblem of the ancient city. Tastefully appointed with traditional Chinese features, the hotel's distinctive exterior emulates structures from the ancient city, with architectural accents such as wood partitions and columns that blend seamlessly with its surroundings. Complementing the architecture, LTW aims to bring forth Confucian values through aesthetics inspired by the Six Arts, including music, rituals, and calligraphy.



Photo: © Seth Powers

Lead8 appointed lead designer on Hong Kong International Airport Terminal 1 Boarding Gate Transformation

Hong Kong – Lead8, the award-winning international firm of Architects, Masterplanners, Interior and Graphic Designers, has been appointed lead designer for the planned Hong Kong International Airport (HKIA) Terminal 1 renovation. Working with Airport Authority Hong Kong, Lead8 will spearhead a collaboration of internationally renowned consultants to deliver a transformative upgrade to the passenger halls of the 21-year-old iconic aviation hub.

The Boarding Gate Transformation project is expected to be completed in 2021. Lead8's design scope includes a total overhaul and upgrade of the 49 boarding gates and adjacent areas of the Level 6 departure concourses. The renovation work will include upgraded technologies at all boarding gates, along with new and refreshed beam seating across all departure waiting areas. In addition, retail and service cabins will be upgraded

with more convenience for passenger access, all targeting to deliver a more fluid experience for travellers.

"The refreshed look of the terminal will bring an inviting ambience that combines new technological features to convey convenience and comfort to the terminal's local and international travellers when transiting to and from Hong Kong," said Christine Hau, Co Founder & Executive Director of Lead8.

Contemporary seating designs with upgraded charging facilities will provide passengers with convenient and comfortable waiting experiences. The retail and service cabin facilities have also been upgraded to offer a rejuvenated



Photo: © Lead8

environment for awaiting passengers.

Lead8 have also curated a number of entirely new experiential zones that will provide places of entertainment, relaxation, onthe-go work and general down-time spaces for passengers awaiting flights. The Boarding Gate Transformation project at HKIA Terminal 1 adds to Lead8's aviation portfolio which also includes the appointment as Lead Architect on SKYCITY, Hong Kong's largest future retail, dining, entertainment destination. In addition, the company has also secured a major role as commercial landside terminal Lead Designer on the new Beijing Daxing International Airport to be completed in the first half of 2020.

Call for Entries: 2020 UNESCO Asia-Pacific Awards for Cultural Heritage Conservation

Bangkok, Thailand — Submissions are now being accepted for the 2020 UNESCO Asia-Pacific Awards for Cultural Heritage Conservation. In the upcoming cycle, UNESCO introduces the "Special Recognition for Sustainable Development" and an updated set of Awards criteria to acknowledge more prominently the role and contribution of cultural

heritage to sustainable development within the broader framework of Agenda 2030.

The deadline for the receipt of materials is 30 June 2020. Winners will be announced in November 2020 in the following levels of achievement: Award of Excellence,



Award of Distinction, Award of Merit, Award for New Design in Heritage Contexts and Special Recognition for Sustainable Development.

Entries for the 2020 Awards programme are required to submit the entry form online before deadline. In addition, the project dossier with supporting documentations including a description of the project in the

official format, and drawings and photographs in hard and soft copy formats should be posted to UNESCO Bangkok by mail, postmarked no later than 30 June 2020.

To apply for the 2020 Awards and for relevant resources, visit: http://bangkok.unesco.org/content/apply-awards.

Keppel Land invests in Smartworks, a leading pan-India flexible space solutions provider

Singapore – Keppel Land Limited (Keppel Land) has invested US\$25 million in Smartworks Coworking Space Pvt. Ltd (Smartworks), a leading pan-India flexible space solutions provider with a presence in nine major Indian cities, namely, Delhi, Noida, Gurgaon, Kolkata, Bengaluru, Mumbai, Hyderabad, Chennai and Pune.

Founded in April 2016 by Neetish Sarda and co-founded by Harsh Binani, Smartworks has grown rapidly to become India's market-leading provider of quality flexible spaces for enterprise companies. As at 31 October 2019, Smartworks had



Photo: © Keppel

23 operational centres in nine cities offering a total of about 43,000 workstations spread over 2.3 million square feet. Its centres cater to over 400 organisations, comprising mainly large enterprises and high-growth startups such as Amazon Web Services, Bacardi Limited, DHL, Ernst & Young, Hitachi, Jaguar Land Rover Automotive PLC, Microsoft Corporation, Petronash, Red Hat, Ricoh and Samsung. Over the next five years, Smartworks plans to grow its footprint to 20 million square feet and provide office solutions for over 200,000 working professionals.

Mr Tan Swee Yiow, CEO of Keppel Land, said, "Smartworks' innovative business model, coupled with its strong knowledge of the Indian enterprise office segment and execution abilities, is highly scalable and relevant, particularly in India's growing market for commercial office spaces. This investment allows Keppel Land to enter one of the world's fastest-growing flexible office markets, opening doors for further growth through this collaboration."

Mr Neetish Sarda, Founder of Smartworks, said, "We are delighted to partner with Keppel Land, Asia's premier real estate developer and multi-faceted property company. We are excited to continue driving our exponential growth in our mission to deliver lasting and affordable office experiences with state-of-the-art office infrastructure and recreational facilities for India's leading enterprises in partnership with Keppel Land."

Surbana Jurong establishes new fire safety consultancy unit to strengthen fire safety standards and compliance in buildings

Singapore – Surbana Jurong, one of the largest global urban, infrastructure and managed services consultancies based in Asia, has established a Fire Safety Consultancy unit to augment its multidisciplinary core capabilities, in the light of recent regulatory changes in fire safety legislation and major fire incidents worldwide.

The unit will offer solutions on fire safety as well as help strengthen the regulatory compliance of commercial, industrial and residential projects, and hence contribute to a safe and secure built environment globally. This will further add to Surbana Jurong's efforts in making sustainability a core delivery objective for all its projects globally.

Fire safety plays an integral role in a constantly evolving built environment, where buildings and infrastructure become increasingly complex and sophisticated. For instance, large-scale integrated mixed-use developments and deep underground infrastructure, rail network and roads are developed to meet today's societal needs and optimise land



Christopher Tan, Managing Director, Fire Safety Consultancy, Surbana Jurong

use. With such a complex urban landscape, customised fire safety solutions involving the use of fire engineering, advanced modelling and computational tools are necessary.

Considering the global trend of ageing population, it is also important to ensure that future buildings are fire-proofed for the elderly. In Singapore, it is estimated that one in four Singaporeans will be aged 65 and above by 2030. Hence, the new Fire Safety Consultancy unit will explore innovative approaches to design fire-safe homes for seniors, where evacuation may not be required in the event of a fire or through utilising technology-enabled solutions and innovative materials.

It will also be relevant to building owners when the new amendments to the Singapore Fire Safety Act kick in this year. Under the new amendments, buildings identified for the mandatory upgrade will be required to install critical fire safety provisions. This applies to older and existing buildings which have not met fire safety measures as stipulated in the prevailing Fire Code.

The Fire Safety Consultancy unit will be able to help building owners identify and address these gaps while balancing the costs of implementing them.

Mr Wong Heang Fine, Group Chief Executive Officer of Surbana Jurong said, "With the new capability in fire safety consultancy, we are able to offer solutions to fire-proof buildings and create safe and sustainable spaces where communities can live, work and play in. Often, our clients tend to involve the fire safety experts at the late stages of the development with dire consequences. With the new fire safety engineering expertise, we are able to mitigate fire safety risks and ensure more pragmatic and calibrated regulatory compliance of our projects globally."

The new unit will be helmed by Mr Christopher Tan, the former Senior Assistant Commissioner and Director of the Fire Safety & Shelter Department at the Singapore Civil Defence Force. Mr Tan has over three decades of experience in fire safety governance and design, emergency planning and incident command.

Swiss-Belhotel International makes Malaysian debut with launch of Kuantan waterfront property

Hong Kong – Swiss-Belhotel International's acclaimed success story over more than three decades has been marked by milestones – and another has just occurred with the soft opening of its first Malaysian property.

In Swiss-Belhotel Kuantan, the global hospitality management chain offers a remarkable four-star hotel on the East Coast of Peninsular Malaysia, facing the South China Sea, only 2 kilometres from buzzing Kuantan, the capital of the culturally rich Pahang state.

Located in the traditional fishing village of Tanjung Lumpur, the 27-storey property has 366 rooms and suites – all featuring modern amenities for business and leisure travellers such as LED TVs, free Wi-Fi and power showers. The 86 Family Rooms create opportunities for multi-generational vacations, 16 suites offer additional luxury and exclusivity.

Swiss-Belhotel Kuantan provides an array of upscale leisure facilities including a swimming pool, children's pool, Jacuzzi, fitness centre and "Water Lounge". Adding to the property's appeal are 10 state-of-the-art Meeting rooms including a Ballroom which



are suitable for all types of events – from intimate strategy meetings and training sessions to grand corporate Conferences and Gala dinners.

Swiss-Belhotel Kuantan is the first stage of the Kuantan Waterfront Resort City (KWRC), a superb 200-hectare mixed-use development and the region's first integrated leisure, retail, dining, entertainment, hospitality and residential landmark. Its other features include a business park, healthcare

hub and tourist resort, making it the destination's premier MICE venue. This visitor magnet will feature a Marina walk, Green promenade, Waterfront Bars and Restaurants, including a Floating Restaurant, Duty-Free shopping, Golf Course and a Waterpark with a variety of Watersports adding to the appeal.

In short, KWRC is a game-changer for the region, with Swiss-Belhotel Kuantan now the Hotel of choice for business and leisure guests.

Mapei develops "Extreme" coatings for protecting and colouring pavements and lanes

Singapore – Mapecoat TNS Extreme is a new product designed to protect and colour urban spaces that have to withstand high levels of wear from pedestrians.

This two-component rapid-drying, coloured epoxy-acrylic resin-based coating is resistant to foot traffic which makes it ideal for cycle-pedestrian paths, road surfaces, access ramps, etc.

Mapecoat TNS Extreme dries very quickly allowing work to be completed quickly. After drying, it forms a hard-wearing, durable protective layer on the substrate. Mapecoat TNS Extreme can be combined with Mapecoat TNS Primer EPW two-component, epoxy resinbased primer which can be used as an adhesive promoter for absorbent, porous cementitious substrates and existing playing surfaces. The result is a textured finish that is non-slip, even in wet weather.



Mapecoat TNS Extreme was applied at the Lungomare della Liberta cycle path in Italy. Photo: © Mapei



Application of Mapecoat TNS Extreme at Lungomare della Liberta cycle path. Photo: © Mapei



Mapecoat TNS Extreme was used for coating the tracks at the Cyclist Park in East Coast in Singapore. Photo: © Mapei

The product can be used to apply on existing asphalt or concrete substrate which can protect it from wear caused by constant passage of pedestrians or passing traffic. When applied on pervious substrates, the drainage capacity of the substrate may be maintained.

The coating is durable and highly resistant to chemical products that could potentially harm the surfaces, such as oil and fuel. In addition, it is resistant to most climatic conditions and aggression from smog and UV rays.

Available in a wide range of colours, Mapecoat TNS Extreme not only protects but provides the possibility of decorating urban spaces.

Mapecoat TNS Extreme have been used for coating the tracks at the Cyclist Park in East Coast and for coating existing old pavements at the Sungei Buloh Wetland Reserve in Singapore.



Mapecoat TNS Extreme. Photo: © Mapei

R+T Asia and HD+ Asia postponed to 2021

Shanghai, China — After comprehensive market analyses, constructive discussions with exhibitors, as well as recommendations from the China's Joint Prevention and Control Mechanism of the State Council, VNU Exhibitions Asia and Landesmesse Stuttgart, the organisers of the R+T Asia and HD+ Asia, have announced their decision to postpone both shows to March 16-18, 2021.

"We believe that postponing our shows until March 2021 is best for the health and safety of exhibitors and visitors, as well as for the vitality of commerce and trade," said Jessica Zhu, Vice President of VNU Exhibitions Asia.

At the beginning of the year, in the early stages of the coronavirus outbreak, the organisers postponed the show from February to June 2020. They were convinced that it was the best solution, and they invested massive manpower and resources toward that end. However, the unforeseen global development of the pandemic has necessitated the further postponement of the trade shows.

"For 16 consecutive years, we have worked hard together to grow the entire industry, and we will put all our



Photo: © VNU Exhibitions

efforts to make sure that R+T Asia 2021 and co-located HD+ Asia 2021 will be exceptional, bringing together networking opportunities, the newest products, educational events and co-exhibitions." said Zhu.

"This is the moment to stand together, support each other and our industry. This is why we are working now on new concepts, including digital marketing solutions, which will be announced soon," she continued.

Organisers of R+T Asia and HD+ Asia thank their exhibitors and visitors for their understanding, trust and their long-term support, and remain committed to working together with all their supporters to find the best solutions for the future.

More information on R+T Asia can be found at en.rtasia.net.

Thailand Lighting Fair and Thailand Building Fair 2020 to showcase infrastructure opportunities in ASEAN

Bangkok, Thailand – Thailand Lighting Fair (THLF) and Thailand Building Fair (THBF) will adopt a new show theme of 'Cities and Buildings of the Future' at the Bangkok International Trade & Exhibition Centre, from 25–27 November 2020.

Under the new show theme, the fairs will showcase how the infrastructure opportunities within the region have led to the development of both lighting and building technology solutions for three key sectors: cities, buildings and factories.

By showcasing technological solutions for ASEAN's growing construction and infrastructure industry, THLF and THBF 2020 will serve as the ideal networking platform for government officials, property developers, construction & infrastructure companies, investors and technology & solution providers. The fairs will provide one central sourcing hub for both lighting and building solutions, covering three key divisions: cities, buildings and factories.



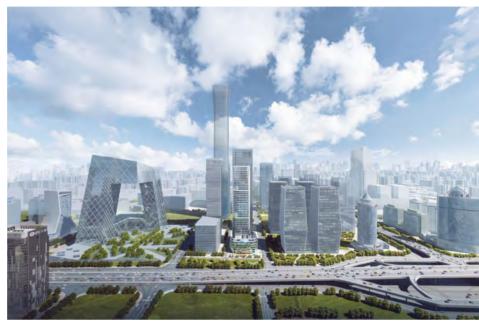
Photo source: Guangzhou Guangya Messe Frankfurt Co Ltd

Award-winning Sunshine Insurance Financial Center tops out in Beijing

Hong Kong – Woods Bagot's Beijing studio and Sunshine Insurance celebrated the topping out of the new Sunshine Insurance Financial Center on January 21, 2020. The 205-metre tall building is located on the East Third Ring Road and Guanghua Road adjacent to the iconic China Media Group headquarters and China World Trade Center.

Challenging the conventional square footprint common to most towers in the CBD, Sunshine Insurance's ground-level podium takes inspiration from a lotus flower with a bulbous form and an open ceiling that highlights plantings in the garden. The tower reaches skyward from a regular square base on the ground level and gradually ascends to an oval shape on top. The shape of the building rotates upward to create maximum long-distance view for the upper level offices and a 360-degree response to its surroundings. The tower's facade follows the route of the sun, on which the sunbeam is cast and reflected throughout the day.

"The unique design strategy resolves the site's limitation as we attempt to maximise the project's value given a compact site area with other office towers nearby. As a result,



Sunshine Insurance Financial Center at Beijing central business district, pictured above at centre, foreground. Photo: © Woods Bagot

we offer this one-of-a-kind commercial building to the stakeholders and the future Beijing CBD community," said Jean Weng, China Director, said.

The 42-storey development is comprised

of offices, multi-functional event space and business amenities spanning 90,000 square metres. Scheduled for completion in the Fall of 2020, the project is targeting a LEED gold rating.

Mövenpick opens new international resort on Phu Quoc Island

Phu Quoc, Vietnam - Mövenpick Hotels & Resorts has unveiled an exciting new address showcasing the brand's signature Swiss hospitality excellence in Vietnam. Mövenpick Resort Waverly Phu Quoc is the first international premium resort to open along Phu Quoc's idyllic Ong Lang Beach, and is poised to become the destination of choice for family adventures, company trips, dream weddings, romantic honeymoons, and more. The hotel features 305 guestrooms, while the adjacent Mövenpick Residences Phu Quoc offers 329 apartment-style residences and 79 pool villas, perfect for families or extended stays. Designed with a tropical style, Mövenpick Resort Waverly Phu Quoc harmoniously blends modern and traditional touches with plenty of natural light streamed through full-sized windows. The contemporary guestrooms feature an elegant interior in soothing neutral tones. Floor-to-ceiling glass doors lead to private balconies in each hotel room, offering sweeping views of the shimmering sea or verdant mountains. Rooms range from a spacious 35 square metres to an expansive 72 square metres for a Junior Suite. Modern in-room comforts include complimentary high-speed WiFi, a pillow menu, and a fully-stocked minibar.



Photo: © Mövenpick Resort Waverly Phu Quoc

DOMOTEX asia/*CHINA*FLOOR announces the new dates: August 31 – September 2, 2020

Shanghai, China – The organisers of DOMOTEX asia/CHINAFLOOR confirm that the leading flooring show in Asia Pacific will take place from August 31 to September 2, 2020 with a total of 185,000 square metres gross space. With the new date, the exhibition gets also a new location: the National Exhibition and Convention Center (NECC), the largest exhibition center in Shanghai. The postponement of the original date (March 24–26) was necessary to protect the health and safety of exhibitors and visitors from the recent outbreak of the coronavirus in China. International visitors welcome the new dates since conveniently after the summer holidays and perfect restart of the second half of the year. Moreover, organizers research has shown that September is the month with most international visits to Chinese suppliers.

"Confident in the improvement of the situation in China by the end of August 2020, and inspired by the can-do attitude of the DOMOTEX asia/CHINAFLOOR exhibitors, we are optimistic of a safe and successful 22nd edition of the show," said Mr. David Zhong, President of VNU Exhibitions Asia. "We are now resuming our preparations with exhibitors and working on the layout of the halls," he added.

As always, Shanghai will continue to host the exhibition, but the postponement of the event has necessitated a move to the National Exhibition and Convention Center (NECC). The NECC is the largest exhibition complex in Shanghai, located in the immediate vicinity of Shanghai-Hongqiao International Airport and the Hongqiao transportation hub, with excellent connections to metro, high-speed trains, and buses, guaranteeing very good accessibility for visitors. DOMOTEX asia/CHINAFLOOR has seen a great success over its 21-year history.

The upcoming edition will continue providing the international audience with the unique events and showcases, such as Treasures



Photo: © VNU Exhibitions

of the Orient – a new area featuring handmade carpet and rug exhibitors from India, Afghanistan, Nepal and other regions, and Southeast Asian Business Hub – an exclusive area with SPC and wood flooring exhibitors whose production is located in Southeast Asia

DOMOTEX asia/CHINAFLOOR will also present a complete array of high end design rugs from China and abroad. Cadex conferences will complete the design area, featuring one more time important KOLs as speakers in their design forums and conferences. Last but not least, the global market overview, including the opportunities and obstacles in the international wood and resilient flooring market will be presented at the World Flooring Forum.

For more information, visit www.domotexasiachinafloor.com.

Poul Due Jensen Foundation to donate 200 million DKK, help fight COVID-19

Singapore – In celebration of Grundfos' 75th anniversary, the Poul Due Jensen Foundation (Grundfos Foundation) has expanded its budget for donations from planned 125 million DKK to 200 million DKK. The main donation areas remain water, research, and inclusion, but the Foundation will move its attention to the fight against COVID-19 this year.

The Poul Due Jensen Foundation has received the annual report from the Grundfos Group and greatly appreciates the historic levels of growth and profitability. The result increases dividend paid out to the Foundation whose primary purpose is to own and develop Grundfos. The Foundation also contributes to society through philanthropic donations within three strategic areas: Research and

learning, Water and development, and Inclusion. The Foundation committed 117m DKK to philanthropic projects in 2019.

Kim Nøhr Skibsted, Executive Director, Poul Due Jensen Foundation said: "In 2020, Grundfos turns 75. This is a good occasion for expanding the donation activities significantly, and we plan to commit 200 million DKK to donations this year. The funds will primarily support our existing donation areas where we support mission-driven research and learning, sustainable solutions, humanitarian aid through access to drinking water and inclusion of the socially vulnerable through public-private collaboration. There's plenty of worthy causes to support, and our donations should help bring about new, groundbreaking solutions."

Pomeroy Academy launches sustainability scholarship for Southeast Asia built environment professionals

Singapore – Singapore's Pomeroy Academy and The University of Cambridge Institute for Sustainability Leadership (CISL), UK, announced the launch of a new scholarship aimed at supporting Southeast Asia's next sustainability leaders on March 11, 2020.

Open to Southeast Asia professionals looking to enrol at Cambridge University's prestigious Interdisciplinary Design for the Built Environment (IDBE) Master's degree, the Pomeroy Academy Scholarship for Interdisciplinary Design for the Built Environment will support one student per year from the Southeast Asia region who can demonstrate their interest in, and commitment to, the design and development of sustainable built environments.

The scholarship was created by award-winning architect, academic, and IDBE (cohort 10) alumnus Professor Jason Pomeroy, founding principal of Singapore-based designers and thought leaders of sustainable built environments, Pomeroy Studio and sustainability researchers and educators, Pomeroy Academy. Professor Pomeroy attributes much of his success in forwarding the green agenda in Asia to the collaborative, interdisciplinary approach to creating sustainable built environment projects which is at the heart of the IDBE programme.

Supported by expert tutors and practitioners from academia and industry, the IDBE post-graduate programmes offers an interdisciplinary approach to learning for built environment professionals, structured around emerging trends, opportunities, and challenges within the built environment, covering sustainability and resilience, health and well-being, energy, efficiency, conservation, heritage, stakeholder engagement, politics and regulation.

"In the wake of population increases, climate change, globalisation and unpresented technological advancements in Asia and across the world, sustainability in the built environment has never been more crucial," said Professor Pomeroy.

"As an alumnus, the IDBE course at CISL is close to my heart, having helped me to hone the interdisciplinary skills necessary to push the boundaries of the sustainability agenda in Singapore and the wider region. It is now my privilege to support others in receiving the support and guidance they need to make a difference at policy level to achieve the common need for more sustainable, low energy, low water designs to enhance the lives of communities across the Southeast Asia region."

Commenting, IDBE Course Director, Dr. Kayla Friedman, said: "Southeast Asia is expected to grow rapidly in the next 30 years while simultaneously being prone to a number of increasing climate risks. The region needs more built environment professionals with the knowledge and networks to drive change and ensure resilient future-proofed built environments."



2020 will be a stellar year for world-renowned architect Jean-Michel Gathy

Singapore — Award-winning architectural and interior-design legend, Jean-Michel Gathy, embarks on a stellar year with five new hotel openings planned and the announcement of some major Master Plan projects.

Principal designer of Denniston which he founded in 1993, Jean Michel Gathy is acknowledged as 'the Architect's Architect' – creator of some of the world's most luxurious hotels including properties for Aman, Mandarin Oriental, and Cheval Blanc.

Many of these have

revolutionised high-end travel and the tourism economy of several countries, pioneering the use of tents as luxury accommodation, over-water hammocks and elevating hotel

architecture and design to game-changing new levels.

From the classic elegance of Four Seasons properties to the playfulness of One&Only, and the Zen of Aman, 2020 openings will include:

Jean-Michel Gathy. Photo: © Denniston

- Four Seasons, Bangkok, mid 2020: interior design and landscaping, with unique river frontage on Chao Phraya River, a dominance of water features and garden courtyards and a collection of art installations curated by Gathy himself.
- Four Seasons, Tokyo, mid 2020: interior design the property is unique in entirely overlooking the Imperial Palace so that one challenge has been to respect the laws that forbid looking 'down' on the Emperor.
- One&Only, Montenegro, July 2020: architect, designer and landscaper, carefully melding the aesthetics of Venice, the Ottoman empire and the vernacular of Montenegro.
- Jumeirah, Bali, Summer 2020: interior design taking as its theme the colonial Royal of the 1940s.
- Aman, New York, December 2020: a hero project in the iconic Crown building on 5th Avenue.

Additionally, Jean Michel Gathy's Denniston have been contracted as Master Planners on two vast, game-changing projects in America and the Middle East, soon to be announced.

Mitsubishi Electric to supply elevators for government-owned medical facility in India Tokyo, Japan - Mitsubishi Electric Corporat announced that its subsidiary Mitsubishi Eleva

Tokyo, Japan – Mitsubishi Electric Corporation announced that its subsidiary Mitsubishi Elevator India Private Limited (IMEC) has secured a major order from the All India Institute of Medical Science (AIIMS), Bilaspur, Himachal Pradesh.

The order consists of a total of 64 elevators, including 48 of a model that is exclusive to the Indian market, at this Indian government-owned medical facility, which houses a hospital and a national medical institute. By means of these high quality elevators and services, Mitsubishi Electric aims to provide the safe and reliable vertical transportation required by medical facilities.

Of the 64 elevators, 48 are "NEXIEZ-LITE MRL", models designed exclusively for the Indian market which were released in April 2019 and are manufactured by IMEC. They are equipped with specific functionality required in India such as automatic emergency landing devices, which operate in the case of a power failure, as standard.



Image of Mitsubishi Elevator "NEXIEZ-LITE MRL".

Centara and Hua Hin Pearl sign HMA for Cha Am Resort

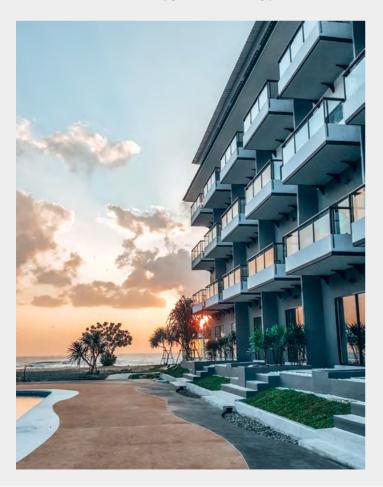
Bangkok, Thailand – Centara Hotels & Resorts, Thailand's leading hotel operator, and Hua Hin Pearl Resort Company Limited, announced the signing of a Hotel Management Agreement (HMA) for Centra by Centara Cha Am Beach Resort Hua Hin. Senior executives from the two companies officially executed the agreement at a signing ceremony held on 25 February 2020 at Centara's flagship Centara Grand & Bangkok Convention Centre at CentralWorld.

Hua Hin Pearl, the owner of the property which is owned by a major shareholder of KTIS Group, a leading Thailand-based sugar company, acquired the former Beach Garden Hotel and carried out a complete floor-to-ceiling, property-wide renovation.

"We are delighted to be working with Hua Hin Pearl on the first Centara property in Cha Am," said Thirayuth Chirathivat, Centara's CFO.

"I am pleased to be working with the Centara team on the launch and long-term management of the resort," added Parphan Siriviriyakul, Chairman of Executive Committee Hua Hin Pearl.

Centra by Centara Cha Am Beach Resort Hua Hin is an elegant 190-key midscale hotel located right on the Cha Am beachfront along the shores of the Gulf of Thailand. The renovation comprised a significant upgrade to all accommodation and facilities, including the creation of pool access units, development of a new restaurant and beach bar venue, and upgraded swimming pool facilities.



Keppel and CIFI to jointly develop a residential site in Taichang City



Residential site in Taicang City. Photo: © CIFI

Singapore – Keppel Land China Limited (Keppel Land China) is forming a joint venture with property developer, CIFI Holdings (Group) Co., Ltd. (CIFI), to jointly develop a 5.85-hectare residential site in New District, Taicang City, Jiangsu Province, China.

Keppel Land China, through a wholly-owned subsidiary, has acquired a 49 percent equity interest for approximately RMB498 million (approximately S\$97 million) in Taicang Xuchang Property Co., Ltd. (TXPC), which owns the site. The remaining 51 percent stake will be held by Shanghai Shengji Industrial Co., Ltd., a subsidiary of CIFI.

The site has a gross floor area of 117,052 square metres and can yield 1,072 high-rise residential units. Phase 1 is expected to be launched in fourth quarter of 2020 and development of the entire project is slated for completion in 2021. The estimated total development cost for the project is expected to be in excess of RMB2.4 billion (approximately \$\$469 million).

Located in the southeastern part of Jiangsu Province, Taicang City borders Shanghai and is 40 kilometres from Shanghai's city centre. The city is often regarded as Shanghai's gateway city to the north. Taicang City has been identified as a key city for the integration of Yangtze River Delta economies. With the infrastructure development that is already underway and backed by a sound industrial base, it is well-positioned to enjoy opportunities brought about by China's Yangtze River Delta integration plan.

Purpose-built wellness residential community to be developed in Phuket by Montara Hospitality Group

Bangkok, Thailand – Montara Hospitality Group (MHG), the Bangkok-based developer behind the award-winning luxury resort destination Trisara and Michelin-starred PRU, announced the development of a comprehensive health and wellness residential community in Phuket, Thailand, to be completed in 2022

MHG is investing over THB 6,600 million (USD 220 million) in the development of Tri Vananda, envisioned to become Asia's largest and most comprehensive wellness residential community.

Tri Vananda will feature 298 villas, anchored by a wellness resort specializing in integrative and functional medicine and cognitive wellbeing in a sprawling hillside setting dotted with lakes and verdant gardens 20 minutes from the Phuket International Airport through lush green scenery.



Rendering: © Tri Vananda

The low-density development is situated on over

230 acres and will be built with sustainable practices in mind, aiming for net-zero emissions and LEED certification. Features include a tiered wetland filtration system with a botanical garden to collect, clean and store water; an organic, non-toxic farm to supply the restaurants onsite; nature trails; and renewable energy facilities such as floating solar panels on lakes.

Two- and three-bedroom solar-powered residential villas ranging in size from 270 square metres to 750 square metres are designed by Habita Architects, renowned for their nature-focused work, together with Arsom Silp Institute of the Arts. The teams in both firms are led by National Artists and UNESCO-recognised architects. Interior design will be helmed by the award-winning P49 Deesign. Villa sales start in July 2020.

KN Paradise Cam Ranh integrated resort to further develop Vietnam's growing gaming industry

Ho Chi Minh City, Vietnam – KN Paradise Cam Ranh Integrated Resort ("KNIR") is a development project incorporated under the KN Cam Ranh Company Limited in Cam Ranh, Khanh Hoa Province, Vietnam. KN Cam Ranh Company Limited has announced their



Bird's eye view of KN Paradise Cam Ranh Integrated Resort. Rendering: © KN Cam Ranh Company Limited

formal intention to develop partnerships in the implementation of investment and operation of their KNIR project. This comes as the Vietnamese government has recently issued the Investment Certificate allowing the KNIR to develop a large-scale casino complex.

KNIR project spans over 800 hectares of land in Cam Ranh and inclusive of a 5 kilometre stretch of pristine beachfront property, KNIR is perfectly located within a five minutes car drive from the Cam Ranh International Airport and 30 minutes' drive from the Nha Trang City. The KNIR master plan includes a wide range of hospitality and residential properties, as well as an abundance of premium facilities including a prestigious award-winning golf course, multiple 4-5 star hotels, luxury resorts, branded apartments, villas, mansions, shophouse, townhouses, casino complex, shopping and duty-free center, MICE facilities, luxury marina, union square, beach clubs, water park, theme park and many more. The 27-hole golf course, named KN Golf Links, opened under the development and design of the golf legend Greg Norman on 27 October 2018.

Architect'20 Expo in Thailand postponed

Bangkok, Thailand – Architect'20 Expo will be postponed to 7-12 July 2020, with enhanced public health measures for exhibitors and visitors.

Following the global COVID-19 pandemic situation, the Association of Siamese Architects Under Royal Patronage (ASA) has decided to postpone the organisation of Architect'20 Expo at IMPACT Challenger Hall, IMPACT Arena, Exhibition & Convention Center, Muang Thong Thani to 7-12 July 2020. The organisers have prepared public health measures to protect exhibitors and visitors against the spreading of the virus

Ajaphol Dusitnanond, President of ASA, discussed the postponement: "Architect Expo is the largest exposition for architecture, material, and construction technology in the ASEAN. ASA organises the event annually during the month of April and May. Due to the specific situation of global COVID-19 outbreak, however, we have decided to postpone the event to 7-12 July 2020 in view of the safety of the participants. The decision has been made after several discussions for the most effective scenario. The organisers have prepared extra security and health measures for the safety of all participants."

Dr. Vasu Poshyanandana, the Chairperson of the Architect'20 committee, commented on the situation: "The annual theme of 'Refocus Heritage' aimed to raise public awareness on the conservation of heritage and tune the perception of the old and traditional towards a different angle. In the same way, this virus situation is one of the evidence that a shift in perception will always be a relevant part of life. We hope that postponing the event will help reassure both our exhibitors and visitors to participate in the event when the situation will have improved."

Mr. Sakchai Pattarapreechakul, President of N.C.C. Exhibition Organizer Co., Ltd. (NEO), one of the organisers of Architect'20 Expo, commented on the participation: "Architect Expo is an important platform in the market of architecture and construction. For the Expo, Thailand Convention and Exhibition Bureau (TCEB) is the sponsor of "Exhibiz in Market" and "ASEAN+6 Privilege" campaigns, which are financial aid programmes for international exhibitors and visitors. In view of safety and health of the participants, the organizers have cooperated with IMPACT Arena, Exhibition & Convention Center



A press conference was held by ASA to announce the postponement of Architect'20 Expo. Photo: © N.C.C. Exhibition Organizer Co., Ltd.

and issued the following preventive measures, according to TISI Standards #22300:

- Alcohol sanitizers will be available at the main entrance, meeting rooms and toilets.
- 2. Participants will be required to go through thermal scanners at the entrance to be screened for abnormal body temperature. Participants who do not meet the criteria will be separated for quarantine.
- Participants will be screened by thermoguns and given a sticker for entry. Different colors of stickers will be used throughout each day of the event.
- 4. Medical staff will be stationed at infirmary rooms.
- Medical stafffrom Bamrasnaradura Infectious Diseases Institute will be on site for support.
- 6. Information on the symptoms of COVID-19 will be advertised throughout the exposition to raise awareness and enhance cooperation from the participants.

Architect'20 Expo "Refocus Heritage" is set to take place between 7-12 July 2020, 10:00 - 20:00, at IMPACT Challenger Hall 1-2, IMPACT Arena, Exhibition & Convention Center, Muang Thong Thani. For more information, visit www.architectexpoasia.com.

BCA introduces several changes to improve safety and accessibility in the built environment

Singapore – The Building and Construction Authority (BCA) has announced several new amendments to enhance safety and improve accessibility in the built environment here. It will introduce a new facade inspection regime, enhance the

regulatory framework for lifts and escalators, allow the Government to mandate a Progressive Wage Model for Singapore Residents in the lift maintenance industry, and require the provision of basic accessibility features for older buildings that undergo addition

and alteration (A&A) works.

These changes are aimed at (i) strengthening the building control regulatory framework in view of Singapore's high-rise builtenvironment and an ageing building stock, and (ii) improving accessibility to meet the

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needs of an ageing population as well as persons with disabilities. In addition, the amended Building Control Act will consolidate requirements over the entire lifecycle of a building, from design, to construction, to maintenance.

Improving facade safety through a Periodic Facade Inspection (PFI) regime

Under the Building Maintenance and Strata Management Act (BMSMA), responsible parties have a duty to ensure that building exteriors are properly maintained. Going forward, BCA will introduce a new PFI regime to facilitate the early detection of facade deterioration and allow defects to be rectified in a timely manner. This will help to reduce the likelihood of facade failure as our building stock ages. The requirements above will now be consolidated into the Building Control Act.

Facade inspections will need to be conducted every seven years for buildings that are more than 13 metres tall, once they are over 20 years old. Landed houses are exempted from these requirements. Responsible parties must appoint a Competent Person (i.e. Professional Engineer or Registered Architect), who can be assisted by a Facade Inspector (FI), to conduct the facade inspections. The Competent Person will propose appropriate rectification works, if deterioration is

detected. These works must be carried out within a specified period.

Given Singapore's building stock, BCA expects more than 4,000 buildings to be inspected each year. BCA will also introduce inspection guidelines and strengthen R&D efforts to look into more effective and productive ways to carry out facade inspections.

Safer lifts and escalators

To strengthen regulatory oversight upstream, BCA will introduce new requirements for the design and installation of lifts and escalators. This will help to reduce the likelihood of deficiencies in design or installation which may give rise to downstream safety incidents. Owners of lifts and escalators will be required to engage the services of Specialist Professional Engineers (SPE) in lifts and escalators to certify the design plans of lifts and escalators, which are to be submitted to BCA for approval. As part of this new plan submission process, BCA will require lift and escalator professionals to ensure that lift models and their key safety components are certified by independent certification bodies.

Raising capabilities of personnel

In addition, BCA, together with the Association of Consulting Engineers Singapore (ACES) and The Institution of Engineers, Singapore (IES), will be registering 2 new groups of inspectors - Facade Inspectors (FIs) and Lift and Escalator Inspectors (LEIs) - to assist the professionals to carry out their work. FIs and LEIs will be required to fulfil the necessary requirements, before they can be registered. This will ensure that the personnel assisting in the site work are competent and qualified.

Accelerate accessibility upgrading for older buildings

To accelerate accessibility upgrading in older buildings, BCA will require buildings without basic accessibility features to provide these when undertaking A&A works that require plan submissions, regardless of where such works are carried out in the building. These features refer to an accessible building entrance, an accessible route within the entrance level and an accessible toilet. The new requirement will apply to commercial and institutional buildings with Gross Floor Area (GFA) of more than 500 square metres.

Other amendments

These include enhancements to the builders licensing scheme for clarity in the governance and accountability of responsible parties; enhancing the safety of Mechanised Car Parking Systems (MCPS); and requirements for relevant parties to notify BCA of safety-related defects and incidents relating to lifts, escalators, MCPS or facades.

Crystalline cubes place 'science on display'

New South Wales, Australia – Molecular Horizons designed by Jacobs and Denton Corker Marshall, houses the University of Wollongong's new 6,900 square metre \$80 million collaborative research facility, containing \$25 million highly advanced microscopy equipment. In response to the equipment's extreme sensitivity to electromagnetic interference, the building is broken into two wings connected by a transparent atrium link.

The north wing houses laboratories and is expressed as a single rectilinear volume, supported by oversized timber columns straddling the crystalline cubic forms of the microscopy suite. Constructed out of glass u-channels with white frit to provide variable transparency, the cubes glow at night and place 'science on display'.

The building's south wing accommodates meeting rooms, breakout spaces, interconnecting stairs, lift cores and common spaces.



Molecular Horizons. Photo: © John Gollings

dormakaba Service offers its customers peace of mind

Singapore – Buildings are meant to last and provide a safe, secure and convenient environment. Whether residential homes, retail shops or hotels. A safe and secure access in and around your premises is a top priority for owners, users, tenants, visitors and investors. Automatic doors, manual door closers and other access solutions are complex pieces of equipment that are subject to high usage and wear and tear.

With over 150 years of experience as an access and security solutions provider, dormakaba is in a superior position of knowledge and resources to offer preventive and reactive maintenance of hardware, software and repairs as well as spare parts. The company's nationwide teams of local, accredited and fully trained & equipped engineers are there. For your peace of mind.





Functionality

Fixing wearing components and malfunctions ensures that your building's access and security solutions run smoothly.



People flow

Only functioning access products enable a smooth people flow.



Building's value

Well maintained access solutions increase your building's value.



Uptime and usability

Ensuring building is secure and your people are safe at all times.



Compliance

Assistance in meeting requirements of your local regulations in a cost effective way.



Sustainability

Regular professional care prolongs the product lifecycle and promotes sustainability.

MTC appoints acting CEO and new COO

Kuala Lumpur, Malaysia – MTC has appointed Mr Wong Kah Cane as its Acting Chief Executive Officer effective 13 March 2020. Mr. Wong, who joined MTC on 1 November 2019 as Deputy CEO, takes over from Mr. Richard Yu Tuan Chong upon the expiry of the latter's contract

Mr. Wong, 52, who graduated with a degree in Business Administration from Universiti Utara Malaysia in 1992, started his career transforming SMEs into successful enterprises by bringing in experts for training programmes which centred on strategic management, quality control, sales and marketing. He is most noted for his contributions in Eu Yan Sang, a traditional Chinese medicine company. Mr. Wong joined Eu Yan Sang in 2000 as its Area Sales Manager and in 2006, he was appointed as General Manager of the company leading Eu Yan Sang's business development, sales and marketing operations as well as branding.

Mr. Wong left Eu Yan Sang as its Senior General Manager to take up the post of General Manager at Everpro Sdn Bhd in 2016 and in 2018, he joined Vistage Malaysia as its Business Coach providing training for CEOs. In August the same year, Mr. Wong was appointed as an Independent Member of MTC's Board of Trustees.

MTC has also appointed Mr. Roger Chin Chew Choy as its new Chief Operations Officer effective 1 March 2020. Prior to joining MTC, Mr. Roger Chin was attached to Advance Information Marketing Berhad where he served as its Executive Director since January 2018. A Bachelor of Law graduate from the University of Wolverhampton, United Kingdom, Mr. Roger Chin, 54, brings with him more than 25



Acting CEO Mr Wong Kah Cane. Photo: © MTC



New COO Mr Roger Chin. Photo: © MTC

years of experience in the financial services sector with international banks specialising in consumer, corporate and Islamic banking.

His career in the banking industry started in 1993 with Standard Chartered Bank in 1993 where was seconded to its regional team in Singapore serving in various Asian countries including Indonesia, Philippines, India, Pakistan and Bangladesh. He had also held senior management positions in Citibank, GE Capital, Hong Leong Bank and Kuwait Finance House.

"The appointment of Mr. Wong Kah Cane and Mr. Roger Chin is to further strengthen the management team of MTC," said Chairman Dato' Low Kian Chuan. He added that with their combined fields of expertise, Mr. Wong and Mr. Chin will be great assets to the timber industry and MTC, a council under the Ministry of Plantation Industries and Commodities.

Postponed: Light + Building to be held in September 2020

Frankfurt, Germany — In view of the increasing spread of the coronavirus in Europe and after intensive consultations, Messe Frankfurt has decided to postpone Light + Building. The world's leading trade fair for lighting and building-services technology will now be held in Frankfurt am Main between September 2nd and October 2nd 2020. The cooperation partners of the international trade fair, ZVEI and ZVEH, support this decision.

The unexpected appearance of Covid-19 in Italy since February 22nd and 23rd 2020 demanded a new analysis of the situation in close cooperation with the public-health authorities of the City of Frankfurt. A multi-stage health check on guests from China has been called for, the implementation of which would be extremely challenging for Messe Frankfurt. Additionally, more and more travel restrictions are being put into place thus making it difficult for both visitors and exhibitors to attend the fair. Therefore, the organisers have decided to postpone Light + Building.

This decision is supported by the cooperation partners of Light + Building,



Photo source: Messe Frankfurt Exhibition GmbH / Jens Liebchen

the Electrical Installation Systems and the Light Working Groups of the Central Association of the German Electrical and Electronic Engineering Industry (ZVEI) and the Central Association of German Electricians (ZVEH). The foremost Italian associations also back this decision. After Germany, the largest groups of exhibitors and visitors come from China and Italy.

UNStudio and UNSense to collaborate with IE School of Architecture and Design as they launch the world's first MBArch

Amsterdam, The Netherlands — IE University's Master in Business for Architecture and Design is a leading global programme that trains professionals with the skills and knowledge they need in management, entrepreneurship and innovation, all aligned within a single vision: business and design are stronger together.

IE School of Architecture and Design is the first higher education institution in the world to offer a Master in Business for Architecture and Design (MBArch). The programme encompasses the experience accumulated through the school's more than a decade of educational leadership at the intersection of design and management.

Martha Thorne, Dean of IE School of Architecture and Design said: "I can't think of any other firm as forward-thinking and ideal for this collaboration. UNStudio and UNSense are exemplary in reorienting the profession to make real, positive impacts in our communities and cities."



Martha Thorne (left) and Ben van Berkel. Photo: $\ensuremath{\texttt{©}}$ UNStudio

One of the main objectives of the school is to educate architects and designers to acquire knowledge and understanding of other fields in order to be effective across industries. Facing complex global challenges, higher education needs to empower architects and designers to fulfill new and expanded roles.



Perkins and Will welcomes new director of operations in New York

New York City, New York, USA – The New York studio of global architecture and design firm Perkins and Will announces the appointment of Enrique Villa as its director of operations. Villa, who joined the practice in late 2019, leads and manages the studio's operations with a focus on business growth, project delivery, project management, and staff development. He works closely with senior leadership to ensure best practices in integrated design across the firm's many disciplines. Villa also helps connect the New York studio with other Perkins and Will studios worldwide to optimise client service.

"Enrique brings incredible expertise to our practice, as well as a passion for sustainability and healthy buildings," said Bill Harris, Managing Director of the New York studio, whose key markets include healthcare, workplace, science and technology, higher education, and planning and strategies. "His deft grasp of material selection and energy-efficient design strategies complement our firm's commitment to a philosophy we call 'Living Design' – that is, design that nurtures holistic well-being and supports life on our planet."



Enrique Villa. Photo courtesy of Perkins and Will.

PLP Architecture wins Delftseplein Competition in Rotterdam

London, UK — PLP Architecture and the developer Provast have won a major international competition for a new tower on a key redevelopment site in Rotterdam. The project, dubbed "Tree House," focusses on creating a lively, inspiring, open and sustainable environment for residents and visitors in the city centre. At 140-metres and 37 storeys tall, the building will sit next to the Central Station as the tallest hybrid structure in the country and will be a bold new addition to the local area.

Tree House's glazed facades are punctuated by long external timber-clad balconies, including some connected by staircases to help animate its urban presence. The upper levels will house 275 apartments, with 185 set aside for private rentals and 30 percent reserved for the mid-market sector. Below this, 15,000 square metres of office space will be geared towards innovation and technology companies and include co-working areas curated by operator TQ. A seventh-floor restaurant will face a lush planted terrace, while at the ground floor, shops, cafes and a multi-function events and performance space help to draw the public in and provide a mix of amenities for the city's use. The project team is working with De Dépendance, Rotterdam's diverse platform for culture and debate, to create socially relevant programming throughout.

The building is being designed to stand at the forefront of architectural sustainability and will feature a part-timber structure with a concrete core, significant reused and recycled materials, rainwater collection and reuse and CO2 storage. External balconies and terraces feature plantings and greenery, spreading up towards a crown of three glazed greenhouses filled with trees and gardens to emphasise a commitment to biodiversity.



Tree House. Photo credit: Wire Collective

Partner Ron Bakker from PLP Architecture said, "We enjoy designing buildings that push boundaries, and this is an innovative, sustainable, mixed-use tower, with a hybrid timber structure, almost on top of Rotterdam's Central Station - a new typology for future cities."

The project was selected from a group of three international team submissions including UN Studio and Group A. Construction is expected to begin in 2021, with completion in 2024.

Foster + Partners wins competition to design Alibaba's new offices in Shanghai

London, UK – Foster + Partners has won the competition to design the new offices for Alibaba – the Chinese ecommerce giant – in Shanghai. As a new signature building for the company, it is set to showcase their unique working culture to the public.

Luke Fox, Head of Studio, Foster + Partners said: "We are delighted to be designing the new Shanghai offices for Alibaba, the world's largest online retailer and e-commerce company. Our design emphasises the importance of communication, the integrity of the working community and above all, the creation of an image that reflects the standing of Alibaba. The scheme is truly designed from the inside out, centred on a dynamic, sheltered public space capitalising on its amazing location with its views of the Huangpu River and the Bund."

Situated at Xuhui Riverside — a new, vibrant part of the city — the building boasts stunning views of the Huangpu River and the Pudong CBD. The building is formed around a central heart that opens up to create a large public urban room, inviting people in. This creates an active social core, with viewing terraces overlooking the central space as well as the building's principal entrances opening onto it. The building is designed to be extremely transparent, allowing people a glimpse into the world of Alibaba as well as preserving views to the outside.

The unique building form has been guided by an innovative design process that uses a genetic algorithm to evolve the optimal massing. The algorithm combines several aspects that are crucial to the project such as, being highly responsive to the environmental conditions, maximising outside views, and the specific area requirements for different functions, to



Rendering: © Foster + Partners

create the most appropriate form. The design optimises the massing to provide the best year-round user comfort in the central public space, protecting it from strong winter winds and the harsh summer sun, while creating tailored workspace solutions for the different departments at Alibaba.

The desk arrangements, break-out spaces and meeting rooms are all carefully considered to encourage collaboration and teamwork. Visual and physical connectivity will encourage interactions. Natural light and external spaces animate the workspaces and create a more focussed and engaged workforce. Following a modular approach, the design will utilise off-site production for quality control, reducing wastage, and minimising on-site operations to create an efficient construction programme.

Chipperfield Building wins the DAM Preis 2020

Frankfurt, Germany – The winner of the DAM Preis 2020 is the new James Simon Gallery, Berlin from Chipperfield Architects.

Since 2007, the DAM Preis for Architecture in Germany has been awarded to outstanding buildings in Germany every year. In 2020, the prize will be awarded by Deutsches Architekturmuseum (DAM) for the fourth time *in close cooperation with JUNG as a cooperation partner* and in a staggered jury procedure.

An expert jury chaired by Stephan Schütz (gmp Architects von Gerkan Marg and Partner, winner of the DAM Preis 2019) selected five projects from the shortlist field as finalists for the DAM Preis 2020 and then the winner.



Photo: © Simon Menges

ZHA to build new OPPO headquarters in Shenzhen

London, UK – Following the international competition, Zaha Hadid Architects (ZHA) has been selected to build OPPO's new headquarters in Shenzhen, China.

OPPO launched their first phone in 2008, growing to become China's leading smartphone manufacturer and the fifth largest worldwide with over 40,000 employees in more than 40 countries. Pioneering new communication technology in smart devices and Internet services, OPPO has established six research institutes, four research & development centres, and a global design studio.

Accommodating this growth, OPPO's new headquarters will continue their commitment to connectivity through design. Conceived as four interconnected towers reaching a height of 200 metres (42 floors), the 185,000 square metres design incorporates two towers of flexible, open-plan spaces linked by a 20-storey vertical lobby, and two external service towers providing vertical circulation. Orientated to maximise the views over Shenzhen Bay, the towers taper inwards at lower levels creating large civic spaces at street level. Locating the towers' service

cores externally frees the centre of each floor from obstructions; providing uninterrupted views throughout the building that will enhance interaction between employees.

Large atrium spaces unite all occupants through visual connectivity, helping to foster collaboration between different departments of the company. The abundance of natural light, varied working environments and diversity of routes for staff and visitors to move through the building are all conducive to creative engagement and spontaneity. Developed as a new civic space for the city with a public walkway diagonally traversing its centre, OPPO's headquarters will include a landscaped plaza, art gallery, shops, restaurants and a direct link to the adjacent station of Shenzhen's subway network.

The 10th floor Sky Plaza will provide local residents, visitors and OPPO employees with varied dining, leisure and entertainment facilities, while the rooftop Sky Lab will be a popular public space with spectacular views over one of the world's most dynamic cities.

Following LEED Gold certification of ZHA's Leeza SOHO tower in Beijing



Rendering: © Zaha Hadid Architects

and Generali Tower in Milan, the new OPPO headquarters has been designed to target LEED Gold from the US Green Building Council; developed with 3D Building Information Modelling and energy management systems to optimise efficiencies. Breaking ground later this year, OPPO's new headquarters is planned to complete in early 2025.

Treehugger, a bold concrete building by MoDusArchitects wraps public space with sinuous curves

Bressanone, Bolzano, Italy – Italian architecture firm MoDusArchitects presented its recently completed TreeHugger, the new Tourist Information Office building of the city of Bressanone (Bolzano, Italy), and winning entry of an international competition held in 2016.

Located just outside the historical centre of the South Tyrolean city, adjacent to the Bishop's Palace of Bressanone, the eye-catching concrete building is the last episode in a series of "architectural homicides" dating from the 1800s up until the 1970s. TreeHugger takes on the qualities of airiness and levity in alignment with the site's antecedent structures, which were dedicated to the welcoming of visitors, with their respective features of slender columns, deep loggias, and delicate overhangs.

TreeHugger twists and turns around the central platanus to form an inseparable connection between nature and edifice. The visual and tactile qualities of the roughhewn walls of the bush-



TreeHugger – MoDusArchitects. Photo: © Oskar Da Riz

hammered concrete and the scaly bark of the plane-tree mimic one another in their juxtaposition.

With the tree trunk as the fulcrum, five arched spans release the building from the ground, accompanying the tree upwards to draw an open frame around the tree's crown. In order to achieve the seamless, vertical surface of the outer concrete shell, the full height of the walls was cast from one flow and in successive sections to form a continuous 9-metre-high ring, within which the concrete plates were then poured. The curvature of the walls, together with the floor slabs form a collaborative composition in which the form, the structure and the building facades become one.

The building is almost entirely glazed on the ground floor, which houses the public spaces and info booths, to allow maximum transparency and permeability. The entrance is clearly marked by the inset windows and the large overhang that cantilevers out towards the new square. The upper floor, housing the administrative offices, is closed and enigmatic in the sequence of its convex surfaces.

With its welcoming curves balanced by the decisive concrete tectonic, TreeHugger strikes up a conversation with its historical context while organically attracting passersby and visitors as a magnet devoted to the sharing of local culture.

Strong earnings and increased investments in the future

Nordborg, Denmark – Danfoss delivered strong results and continued the high level of investment in the core businesses to remain at the forefront and be the most attractive technology partner for its customers.

In 2019, Danfoss increased the sales by 3 percent to EUR6.3 billion and delivered strong operating profits (EBITA), that grew 6 percent to EUR 771 million with an EBITA margin of 12.3 percent – a record high operating profit level from a historical perspective. Cash flow from operating activities increased 17 percent to a very strong EUR 789 million.

"2019 was a good year for Danfoss. We increased our earnings and we grew despite difficult market conditions. The global mega-trends continue to transform the world, creating new opportunities for Danfoss. For example, the high global focus on solving climate changes is creating increasing demand for technologies and solutions within energy efficiency, sector coupling, and electrification and green energy. In this context, Danfoss' solutions are more relevant than ever before," said Kim Fausing, Danfoss President & CEO.

"The centre of our strategy is long-term value creation," explained Kim Fausing. "The best way to generate value is to ensure that our core businesses maintain their leading positions globally and that we stay at the technology forefront. At the same time, we have the highest employee engagement ever. Danfoss is and must be the preferred

global technology partner for our customers and partners, and that is why we are continuing our targeted investments in the future."

In 2019, Danfoss continued the high level of investment in new innovative solutions. This was reflected in the 7 percent increase of the innovation expense to EUR 272 million, equal to 4.3 percent of sales. To further strengthen the business segments, Danfoss acquired four companies in 2019. These targeted-acquisitions have added new technologies to the portfolio; for example, to electrify buses, trucks, off-highway vehicles and marine vessels, and smart solutions based on artificial intelligence to optimise heating systems in buildings and district energy networks. Most recently, Danfoss entered into an agreement to acquire Eaton's hydraulics business to become a global leader within mobile and industrial hydraulics, which is one of Danfoss' core businesses.

From Annual Report 2019:

CO₂ neutral in 2030: Danfoss aims to reach a new ambitious target to become CO₂ neutral by 2030 at the latest. Since 2007, Danfoss has reduced its energy intensity by 45 percent and CO₂ emissions by 33 percent, primarily driven by energy-saving projects in the company's largest factories around the world.

30 percent female leaders in 2025: Danfoss has now set new ambitious

targets to reach 25 percent female leaders by 2022 and 30 percent female leaders by 2025. In 2019, Danfoss reached the target of having 20 percent female leaders globally.

Key figures 2019

- Sales increased by 3 percent to EUR 6,285 million (2018: 6,098 million), corresponding to 1 percent growth in local currency.
- Operating profit before acquisitionrelated amortization (EBITA) increased by 6 percent to EUR 771 million (2018:724 million). The EBITA margin was 12.3 percent (2018: 11.9 percent).
- Net profit was up 8 percent to EUR 502 million (2018: 463 million).
- Cash flow from operating activities increased 17 percent to EUR 789 million (2018: 673 million).
- Investmentsininnovationincreased by 7 percent to EUR 272 million (2018: 255 million), corresponding to 4.3 percent of sales (2018: 4.2 percent).

2020 expectations

Despite the current volatility, Danfoss expects to continue to expand or maintain its market share, while maintaining the profitability measured as margin at the 2019 level, following continued investments in sustainable value creation. The outlook excludes any impacts of the acquisition of Eaton's hydraulics business. The transaction is expected to close by the end of the year.



goettsch partners unveils design for signature mixed-use project in Guangzhou

Chicago, Illinois, USA — Global architecture firm Goettsch Partners (GP) has unveiled its design for Poly 335 Financial Center, a 300,000–squaremetre mixed—use complex in the Zengcheng district of Guangzhou, China. Developed by Poly Real Estate Group, the project is conceived as an ideal indoor–outdoor setting for a vibrant, commercially successful community with new residences, offices, shops and hospitality offerings.

GP master-planned the site around a central plaza that provides internal vistas for the multi-building complex and is intended to create a dynamic civic atmosphere for the varied tenants and residents. The phased development is anchored by a soaring, 335-metre-tall landmark office tower poised to become an architectural icon for the region. The 60-storey, 142,000-square-metre Class A office building utilises a series of external trusses strategically located throughout the tower to provide stiffness while integrating the vertical columns to the perimeter profile, creating flexible, column-free interior space.

Additional buildings in the complex include a neighbouring 21-storey hotel tower designed with a similar exterior expression as the supertall tower. The hotel amenities include meeting rooms, dining facilities and a fitness centre intended to seamlessly blend with the three-level, 42,000-square-metre retail mall at the base. Two residential towers, each 57 storeys, line the southern perimeter of the site and will ensure continual activity for the complex.

The landscaped central plaza is the heart of the development. Entry is oriented toward the major vehicular and pedestrian approaches from the southwest, and the meandering path winds its way into the site, transitioning visitors through three distinct stages from an active public square to a more serene retail atmosphere.

The project's first-phase sales centre is already completed on the site, with "335" signage prominently displayed. The entire complex is anticipating completion in 2023.



Rendering: © Goettsch Partners

New dates for the Biennale Architettura 2020

Venice, Italy — The Biennale Architettura 2020, curated by Hashim Sarkis, will be held in Venice (Giardini and Arsenale) from Saturday August 29th (preview Thursday 27th and Friday 28th) through Sunday November 29th, instead of from May 23rd through November 29th, as previously announced.

The new dates for the Biennale Architettura have been established as a consequence of the recent precautionary measures in the matter of mobility taken by the governments of a growing number of countries around the world, which will have a domino effect on the movement of people and works in coming weeks. This period of time coincides with the delicate initial phase of setting up an international exhibition as complex as the Biennale Architettura, which

involves architects and institutions from over 60 countries on all continents.

This situation poses a risk to the realisation of the Exhibition in its entirety in time for the announced opening date (May 23rd), thereby jeopardizing its quality. Furthermore, a short-term postponement could be ineffective, considering the complexity of the organizational machine, the number and importance of the subjects involved and the probable absence of many of them.

Unwilling to open an incomplete Exhibition, La Biennale, having heard the curator Hashim Sarkis and in consideration of the difficulties faced by the Participating countries and invited architects, has decided to postpone the inauguration until August 29th, bringing the duration of this year's edition



Photo by Andrea Avezzù, courtesy of La Biennale di Venezia.



Photo by Francesco Galli, courtesy of La Biennale di Venezia.

Main venues where the Biennale Architettura 2020 exhibition will take place. Arsenale (left) and Padiglione Centrale Giardini (right).

of the Biennale Architettura back to three months, from the end of August to the end of November.

This way, considering that the following week, September 2nd is the opening date of the 77th Venice International Film Festival directed by Alberto Barbera (through September 12th), at the end of the summer, with the almost concurrent opening of these two historic exhibitions, La Biennale will offer Venice and the world a moment of great cultural interest and international appeal.

Lemoal Lemoal Architectes gives the changing facilities of the Garden Tennis Club of Cabourg a new look

Paris, France – Lemoal Lemoal Architectes has just delivered the new changing facilities of the Garden Tennis Club of Cabourg. This new construction, part of an overall site renovation program, further enhances the quality upgrading of the offering at the Garden Tennis Club of Cabourg, which is now part of the Circuit National des Grands Tournois de tennis (CNGT, or the French National Tennis Tournament Circuit). Firmly anchored in their location, these facilities are an example of a traditional building technique, half-timber construction, implemented in a contemporary way.

Special attention has been given to this small scale building, designed to house the changing facilities and lavatories of the tennis complex, in order to ensure it harmoniously blends in with its surroundings. This is achieved through a demonstration of the contemporary relevance of half-timbering, a traditional Norman structural principle. This type of construction presents the added benefit of a sustainable reliance on local companies, materials and skills. Here, the terracotta roof tiles were manufactured in Bavent, a town close to Cabourg.

The project uses the same building principle for the façade as in the half-timbered architecture of Normandy. Here, the solid wooden beams and studs, characteristic of this structural technique, are optimised and highlighted by the interplay of volumes. The wooden sections are left empty whereas the entire system of waterproofing, insulation and carpentry are placed inside the structure.

Structure and water-resistant skin are distinct in this project. A double skin made of exposed polycarbonate, installed inside the wooden sections, forms a light box directly inserted in the structure. The material quality of the



Photo: © Javier Callejas

translucent polycarbonate surface used in this project ensures consistent luminosity throughout the changing rooms while also increasing its visibility on the site. Thus, the wood on the façades is highlighted by the artificial interior lighting.



Photo: © Javier Callejas



Yvonne Farrell and Shelley McNamara receive the 2020 Pritzker Architecture Prize

Chicago, Illinois — Yvonne Farrell and Shelley McNamara of Dublin, Ireland, have been selected as the 2020 Pritzker Prize Laureates, announced Tom Pritzker, Chairman of The Hyatt Foundation, which sponsors the award that is known internationally as architecture's highest honour.

"Architecture could be described as one of the most complex and important cultural activities on the planet," remarked Farrell. "To be an architect is an enormous privilege. To win this prize is a wonderful endorsement of our belief in architecture. Thank you for this great honour."

As architects and educators since the 1970s, Farrell and McNamara create spaces that are at once respectful and new, honouring history while demonstrating a mastery of the urban environment and craft of construction. Balancing strength and delicacy, and upholding a reverence of site-specific contexts, their academic, civic and cultural institutions, as well as housing developments, result in modern and impactful works that never repeat or imitate, but are decidedly of their own architectural voice.

"For their integrity in their approach to both their buildings, as well as the way they conduct their practice, their belief in collaboration, their generosity towards their colleagues, especially as evidenced in such events as the 2018 Venice Biennale, their unceasing commitment to excellence in architecture, their responsible attitude toward the environment, their ability to



Yvonne Farrell and Shelley McNamara, photo courtesy of Alice Clancy.



University Campus UTEC Lima, photo courtesy of Iwan Baan.



Urban Institute of Ireland, photo courtesy of Ros Kavanagh.

be cosmopolitan while embracing the uniqueness of each place in which they work, for all these reasons and more, Yvonne Farrell and Shelley McNamara are awarded the 2020 Pritzker Architecture Prize," stated the 2020 Jury Citation, in part.

"Within the ethos of a practice such as ours, we have so often struggled to find space for the implementation of such values as humanism, craft, generosity, and cultural connection with each place and context within which we work. It is therefore extremely gratifying that this recognition is bestowed upon us and our practice and upon the body of work we have managed to produce over a long number of years," said McNamara. "It is also a wonderful recognition of the ambition and vision of the clients who commissioned us and enabled us to bring our buildings to fruition."

Their native Ireland, an island replete with mountains and cliffs, informs their acute sensitivities to geography, changing climates and nature in each of their sites. Their buildings consistently remain purposefully rich, yet modest, enhancing cities and lending to sustainability while responding to local needs. University Campus UTEC Lima (Lima, Peru 2015) is located on a challenging site with a highway sunk in a ravine on one side and a residential neighbourhood on the other. The result is a vertical and cascading building responding to both site and climatic needs. Its open spaces were designed to deliberately welcome cooling breezes of the ocean and minimise the need for air-conditioning. At the Offices for the Department of Finance (Dublin, Ireland 2009), the selection of local limestone used in thick panels grants strength

to the building. Windows recessed or flush with the façade have grills below them to circulate fresh air throughout the building. Exposures on all sides of the building, atypical of the architecture in this city, offer panoramic views.

The architects are continuously conscious of the dialogue between the internal and external, evidenced by the mingling of public and private spaces, and the meaningful selection and integrity of materials.

The pair established Grafton Architects in 1978 in Dublin, where they continue to practice and reside. In just over forty years, they have completed nearly as many projects, located in Ireland, the United Kingdom, France, Italy and

Farrell and McNamara are the 47th and 48th Laureates of the Pritzker Prize, and the first two recipients from Ireland.



Zishe Planting Pavilion and Planting Terrace

Zishe Planting Pavilion and Planting Terrace, designed by MOZHAO ARCHITECTS won the Overall Winner and the Best Urban Design Project of ABB LEAF Awards 2019.



Night view of the Zishe Planting Pavilion and Planting Terrace.

ith the advantage of geography, Shenzhen Shajing has largely developed the low-end manufacturing industry in the past two or three decades. The mass construction of factories not only destroyed the scenery wetland and farmland, but also brought chaos to the nearby suburb. Industrial parks and external urban spaces form negative places. In recent years, many residential buildings and schools were built around the industrial park. This project hopes to provide a dynamic public space for workers, residents, teachers, students and the plant lovers by reshaping of the green humanities space. With various experiential activities held in the space, the traditional planting culture of Shajing is passed down in a new form, which is also a media for community building.

In the original site layout, there is an outdoor parking lot in the west next to the courtyard. In order to meet the demand



Bird's eye view of the Zishe Planting Pavilion and Planting Terrace in mid air.

for parking, and to improve the spatial quality of the courtyard, a large landscaped terrace was created which covers the parking lot. Connecting by the steps, this large terrace becomes the extension of the courtyard, with which the courtyard establishes the public space system of different levels, and the steps could provide seats for audience when outdoor activities are held in the courtyard. Concrete planting troughs are randomly placed on the terrace, where people can plant various crops and shrubs, depending on their individual preferences, so that these crops and shrubs create interesting and vivid landscape. The big hole on the terrace provides better sunlight for the parking lot below, and the cinnamomum camphora in the middle of the hole also provides greenery for parking.

At the same time, in the northeast of the terrace, there is a planting pavilion made of exposed concrete, which brings plant lovers together to learn from one another. The first floor is a public space for exhibition, communication and lectures, while program of the second floor is a planting and training space. The two-storey height green vegetation wall exhibits various plants, while the two-storey height space becomes learning place for people to communicate and interact with each other. The cantilevered staircase and the hanging floor in the building make it light and delicate. At the same time, the two entrances with different levels in the building create a closer connection among the terrace, the interior space and the courtyard.



Project Name: The Planting Terrace and the Experience Pavilion Location: Quanzhi Technology Innovation Park, Bao'an District, Shenzhen, China

Client: Shenzhen Jialingyu Industrial Limited Company

Design: MOZHAO ARCHITECTS

Gross Built Area: 2080 square metres

Material: Steel, camphor pine wood,

fair-faced concrete

Design Year & Completion Year:

2016/2018

Photo credits: Chao Zhang









JEJU SHINHWA THEME PARK

Design studio IRMS has conceptualised the Jeju Shinhwa Theme
Park on Jeju Island as a fun and world-class leisure
and entertainment facility.

eju Shinhwa Theme Park was a challenging, yet a very fun project for IRMS design studio. The theme park opened on September 30, 2017 and covers 280,000 square metres on the southwest side of Jeju Island. It is only part of the entire Jeju Shinhwa World development which consists of a casino, hotels, townhomes, a waterpark, a convention centre and as well as a retail-dining & entertainment complex.

The entire theme park that IRMS has designed is divided into two phases, of which Phase 1 has been completed with an area of 6.25 hectares. The Phase 1 of the whole development is now the flagship of the The Jeju Shinhwa Theme Park, which brings the fun and life into the entire development. This phase of the theme park features the Koreabased, global 3D animation studio, TUBAn Company Limited. It is through this brand that IRMS was able to bring to life the characters of Rotary Park, Larva, Oscar's Oasis and Wingcle Bear. The characters of TUBAn are fully integrated into the design and attraction stories of

the entire park. Guests are greeted by the TUBAn characters from the moment they enter the main entrance portal.

Phase 1 of the Jeju Shinhwa Theme Park is split into three zones which is Rotary Park, Larva's Adventure Village and Oscar's New World. The park has 15 rides and attractions that spread out among the three zones. The first zone is Rotary Park, the steam punk inspired main street that is protected from the elements by a barrel roof. As guests enter Rotary Park, they will be immersed in an industrially funky steam-punk facades of shops which houses a number of dining, retail and ride attractions. The characters of Rotary Park are the main elements in this zone, their story continues into the ride attraction, "Rotary Park 4D Theater". A dome theatre attraction where quests experience an adventure through the fantastic world of Rotary Park itself. The next major attraction in this zone is "Finding Larva", an interactive walkthrough attraction where guests meet Red and Yellow in the ancient world where they are cursed to be immortals

and follow their journey through the centuries causing chaos and mayhem to our historical events. As guests venture deeper into the zone, they will arrive at the "Central Stage", the outdoor live theatre with scheduled live shows throughout the day. Park guests can relax and enjoy a good meal at Rotary Park's themed dining and café's such as Wingcle's Bistro, Wingcle's Pizzeria and Café Wingcle.

The next zone is "Larva's Adventure Village" where guests walk through an iconic portal that is inhabited by your

PROJECT DATA

Project Name: Jeju Shinhwa Theme Park

Location: Jeju Island, South Korea **Client:** Landing Jeju Development

Co., Ltd

Design Firm: IRMS
Total Area: 28 hectares
Completion: 2017
Photos: © IRMS











favourite Larva characters such as Red, Yellow, Violet, Brown, Black, Rainbow and Pink. Get immersed in the miniature world of Larva where you will meet Red and Yellow among giant sized everyday objects and plants. Hop aboard "Larva's World Express", a train ride that starts in a train station that resembles a giant picnic basket overflowing with delicious goodies. The train ride takes guests into a tour around Larva's Adventure Village zone and through iconic markers around the globe where Red and Yellow left some mischief! Kids can venture and play in the "Adventure Play Ground" where they can lose themselves as miniatures in a land of giant objects. "Larva's Sweet Carousel" is the carousel ride at the heart of this zone, designed as a giant pie decorated with candies and all things sweet including Red and Yellow of course. This zone has an outdoor stage, "Larva Stage" which is equipped with a large format LCD screen that will keep kids entertained with TUBAn cartoons shown all day in between live action musical/comedy shows. When you see the crashed rocket ship among the giant toys, that's "Larva's Space Adventure", an interactive dark ride that sends guests into a mad journey with Red & Yellow that starts in a water drain in New York

City, heads to outer space and different planets with aliens then back again on a curb in New York City. Guests should be starving after all these adventures with Red & Yellow, so head down to "Larva's Cafeteria", a dinerthat is themed like a giant burger, with fries, noodles, meatballs, sausage, sotong and soda.

"Larva's Adventure Village" is perfect for the toddlers and younger kids with tons of activities to keep them busy and entertained.

The third zone is "Oscar's New World" which offers Inca and Maya Civilization-themed buildings and rides. This is where we let loose the crazy



↑ PROJECTS



characters of "Oscar's Oasis", the rambunctious Oscar the lizard, Popy the fox, Harchi the hyena and Buck the vulture. Enter "Buck's Dance", a fun teacup ride that will happily spin your heads to the next ride. Venture into the colourful Maya temple which encloses "Oscar's Storm Coaster", a spinning coaster that is a perfectly fun thrill ride for the entire family. As guests explore deeper into the Maya plains, you will encounter "Oscar's Spin and Bump" standing majestically tall and pulling folks to enjoy this ride. This attraction is a disk'o coaster ride which is another fun ride for the whole family. Make sure not to miss the fun spinning ride just beyond the foliage, "Oscar's Dragon". When hunger strikes, head over to the "Bite Food Court", the Maya temple also off the Maya plains and enjoy some hot meals to fill you up for the rest of the day.









David Parkin

We in IRMS are very proud of this project as we have delivered this theme park from concept to completion.

"Jeju Shinhwa Theme Park" is a whimsical and fun creation that exercises our imagination and defines what we can produce as a creative studio."

– David Parkin, Vice President, IRMS





PUSHKIN THEME PARK

Design and build firm Jora Vision will develop Pushkin Theme Park "Lukomorye" in St. Petersburg to celebrate the works of greatest Russian poet Alexander Sergeyevich Pushkin. lexander Sergeyevich Pushkin is considered by many to be the greatest Russian poet of all times and the founder of modern Russian literature. His literary poems have entertained and inspired children and adults for over 200 years. A.S. Pushkin's fairy tales centre around an imaginary land called "Lukomorye" where many wonderful stories take place.

In December 2018 Svetoch LLC, a company based in Pushkin City St. Petersburg, asked Jora Vision Europe B.V. to assist in the development of a brand new theme park that celebrates A.S. Pushkin's fairy tales. CEO of Svetoch LLC, Mrs. Goloverova, is successfully running Hotel "Natali" (named after A.S. Pushkin's wife) including a Family Entertainment Centre and Spa. Besides this, for years she has been preparing plans to develop a magical place where one can step into the fairy tales of A.S. Pushkin in a modern,

immersive and spectacular way, yet with the typical flair of Russian folklore and tradition.

The main feature of this theme park is an indoor area of around 17,000 square metres that will be opened year round and consists of three main theme zones. Each of the zones contains experiences and attractions based on the fantasy places that A.S. Pushkin describes in his stories: a city, a harbour and a palace. In addition to this year-round indoor area, the park will also feature a two hectare outdoor area with several attractions and activities spread around another three zones: the Jarmarka (Russian fun fair market), the swan lake and the magical fairy tale forest.

Following the pre-masterplanning phase, in September 2019 Svetoch LLC assigned Jora Vision for the full masterplanning and concept design phase to design every ride, experience and guest facility of the new theme

park, including some highly themed experiences such as an immersive walkthrough experience based on A.S. Pushkin's life, and two spectacular dark rides — one of Jora Vision's core specialities. In 2018, the company received a Thea Award for a dark ride in Poland, also based on a local myth/legend: The Basilisk (Bazyliszek in Polish) and for next year a dark ride called Popcorn Revenge, made for Walibi Belgium, will receive the same award.

"We are very proud to pave new ways for theme parks to bring their local stories alive," explained Jan Maarten de Raad, CEO at Jora Vision. "We love unique and meaningful stories, and are excited to harness our skills to bring these local stories to life to an audience which is not yet very familiar with the concept of theme parks and immersive attractions." "Lukomorye", as the Pushkin theme park will be called, is expected to open its doors to the public in 2023.



Floris van Eeden. Photo: © Bram Kloos

"The richly described magical places, characters and their adventures in A.S. Pushkin's fairy tales are truly one of the best sources of inspiration that our creative team could wish for. Our designs for the park's immersive theme zones and all the buildings and attractions included are inspired by the rich and unique Russian architecture styles of the past, the same that also inspired Pushkin 200 years ago when writing his world famous stories."

- Floris van Eeden, Project Architect, Jora Vision Europe B.V.





Immersive & interactive walkthrough experience based on Alexander Pushkin's life.



Park main entrance lobby.





PROJECT DATA

Project Name: Lukomorye – Pushkin Theme Park **Location:** St. Petersburg, Russia

Client: Svetoch LLC

Design & Build Firm: Jora Vision Europe B.V. **Total Area:** 60,000 square metres of land, including:

- main building of 17,000 square metres (contains 3 theme zones, 17 attractions)

- outdoor park area of 20,000 square metres (contains 3 theme zones, 10 attractions)

Completion: 2023

Artwork: © Jora Vision Europe B.V.





NICKELODEON UNIVERSE

Designed by Gensler, there are over 35 rides and attractions inside the Nickelodeon Universe theme park.



With entertainment making up more than half of the complex, it was important to design a theme park that offers a memorable and intuitive visitor experience. While Nickelodeon Universe is a traditional theme park, with the retail and dining options at American Dream. Retailers that complement Nickelodeon Universe, such as IT'SUGAR, are located by the park's entrance and curated for guests to enjoy as they make their way to different entertainment zones."

- Joseph Lauro, Managing Director, Principal



25 October 2019, Nickelodeon Universe, the largest indoor theme park in the Western Hemisphere, and The Rink - an NHL-size ice skating and hockey facility, opened to guests, making the first chapter in the revolutionary destination's opening. Adjacent to The Rink, is a window into DreamWorks Water Park, allowing guests a sneak peek at the progress of the largest indoor water park in North America, opening soon.

Inside Nickelodeon Universe theme park, there are over 35 rides and attractions.

Nickelodeon Universe has world record breaking rides including The Shellraiser, world's steepest coaster, The Shredder, world's tallest and longest indoor spinning coaster, and Skyline Scream, world's tallest indoor spinning drop tower, and Legends of The Hidden Temple Challenge, the world's tallest indoor ropes course.

Regarding the architecture of this project, it was important to allow for natural light to fill the space to create an indoor/ outdoor experience. The building form responds to the rides with several 'pop-ups' in the roof which allow visitors to see views of the New York City skyline as well. The architect also had to balance creating a circulation path within the amusement park that provides clear sightlines of the 35+ rides and attractions and at a comfortable eye level. From families to thrill seekers, Nickelodeon Universe offers a wide variety of programming that can be enjoyed by all.



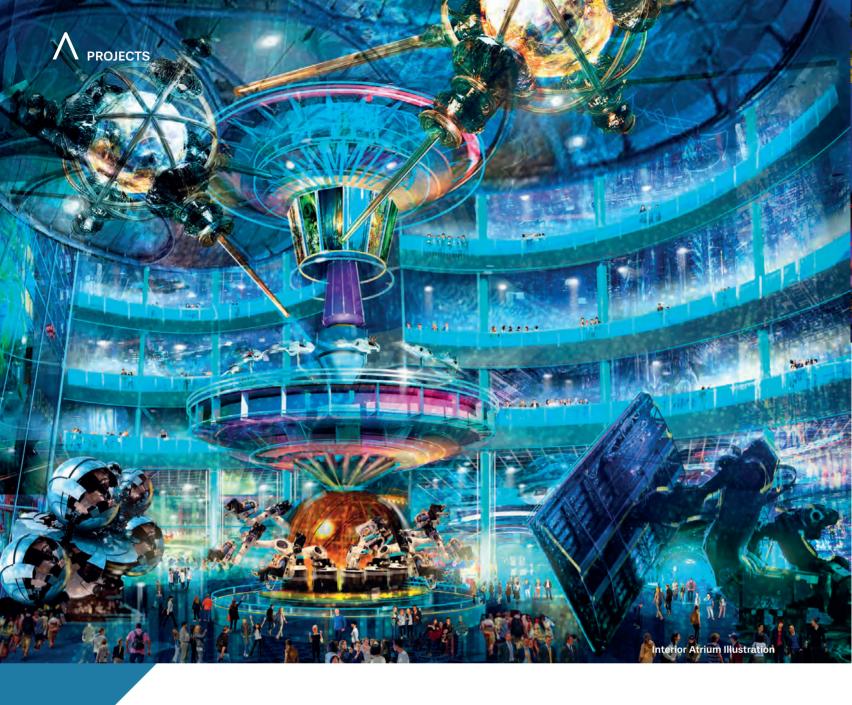
at Gensler

PROJECT DATA

Project Name: Nickelodeon Universe

Location: American Dream, East Rutherford, New Jersey,

Developer: Triple Five Group Architect Firm: Gensler Total Area: Over 8 acres Completion: October 2019



KIM QUY

Kim Quy (translated as "Golden Turtle") is an upcoming entertainment infused, mixed-use project in Hanoi, Vietnam.





TEC Entertainment Corporation, a global industry leader of award-winning themed entertainment solutions, has announced the groundbreaking of a new entertainment based, mixed-use project to be built in Hanoi, Vietnam. Kim Quy (translated as "Golden Turtle") was designed by ITEC Entertainment for Sun Group, one of the largest real estate groups in Vietnam. The project spans 250 acres and is highlighted by a major themed entertainment complex featuring interactive attractions along with the most current immersive, virtual and augmented reality experiences.

Retail, dining and entertainment districts will host international brands and the Kim Quy cultural village which will provide an exciting home for working artisans and craftsmen from the Hanoi region of Vietnam. Tourism and the demand

for entertainment in Vietnam continue to grow and ITEC has several projects in the pipeline for Sun Group as it works to make Vietnam an attractive global destination.

PROJECT DATA

Project Name: Kim Quy Location: Hanoi, Vietnam **Developer:** Sun Group

Designer: ITEC Entertainment Corporation

Total Area: 250 acres

Renderings: © ITEC Entertainment Corporation





Bill Coan

"The project was inspired by a famous Vietnamese legend of the demi god, Golden Turtle or Kim Quy, along with a historical crossbow and shining citadel of Âu Lạc. Our experience design process incorporated those ancient and significant elements to create an entertainment-infused and mixed-use project that celebrates the Vietnamese culture. **

- Bill Coan, CEO & President of ITEC Entertainment and lead designer of Kim Quy.

Custom Playgrounds vs Proprietary (Catalogued) Playgrounds

Text by Patrick Lee, Director, CT-Art Creation Pte Ltd

ith my experience in building both custom and proprietary playgrounds over the past 25 years, I thought that a summary of major issues will be timely for this issue.

As developers and architects are tasked to build more exciting play facilities for their properties to provide better and unique facilities, they sometimes think about planning a custom playgrounds mostly to enhance the history or background of the property.

I would summarise my thoughts by describing what they are and illustrate the pros and cons with a table of comparisons.

Proprietary (Catalogued) Playgrounds

Many playground manufacturers have distinct styles, for example rope play, post and platform system; with slides, climbers etc, stainless steel designs, timber playgrounds, adventure slides tree house, themed playgrounds like insects, animals, independent play items like spinners, see saws.

All the designs are in the catalog with details of safety zone, fall heights, play value and material specifications.

Quality manufacturers have research and design teams to create new play ideas, use suitable materials, ensure safety compliance

through laboratory certifications, provide finished product details, technical specifications, product liability insurance, maintenance and installation instructions.



Custom Playground by Recreology. Photo courtesy of CT-Art Creation.



Proprietary Playground by Playworld. Photo courtesy of CT-Art Creation.

Custom Build Playgrounds

The designer creates a concept of a playground, may be nature, biophilic, animal, fruit, artistic design, designs that reflects the past and present character of the area, terrain, commemoration of famous persons etc. The design can incorporate multi colors not available with proprietary playgrounds.

Idea generation can come from the community and stakeholders on the design of the custom playground.

A higher budget is required for custom playgrounds, and longer project period is required. A period of design and development is required to produce final drawings for approval of the property/location.

Ideas generated are exciting and some technical details are usually not available when the ideas are under design and development.

The safety compliance of the playground is subjected to many factors and much unforeseen situations will arise where design reviews have to be conducted.

Below is a summary of issues relating to building a custom or proprietary playground.

ISSUES ON PROPRIETARY VS CUSTOM BUILD PLAYGROUNDS

S/N	ISSUES	PROPRIETARY PLAYGROUNDS	CUSTOM BUILD PLAYGROUNDS
1	Selection of Play Equipment	Wide selection of equipment and designs.	Designers develop imaginative ideas to create a custom playground.
		Allow pick and choose to integrate into play area.	Limited play items to be integrated into custom design.
2	Designs	Equipment and materials are researched, designed, tested for maximum loading, manufactured for quality in a factory environment.	Less control on manufacturing, some playground manufacturers may undertake custom design work. Most factories feel it is not productive to produce custom designs.
		Subject to colour palletes available in the catalogue.	All colours are available.
3	Costs & Lead time	Value for money	Increased budget
		Less lead time	Increased lead time to include design and development.
4	Play Value	Can be very rich in play value, climbing, rocking, balancing, swinging, spinning.	Ideas for custom design are mostly based on the aesthetic appeal to adults and surrounding infrastructure.
		Equipment can be easily selected for age appropriateness.	In-depth knowledge on age-appropriate play equipment is needed to create play space for different age groups.
5	Play Value / Inclusivity	Inclusive play equipment are specially designed for different physical challenges.	A person knowledgeable in inclusive play requirements and play safety is required to create an inclusive playground.
6	Safety	Designers follow instructions and details from catalogue.	Designers must have knowledge of playground safety requirements.
		Design and safety zone details are available so as to minimise safety non-compliance.	Designs do not meet safety requirements, for example, swings should not be attached to a structure.
		Equipment are tested and improved in-house by third party professional playground auditors before they are put into catalogues for sale.	Equipment can only be audited after installation. A local professional engineer can oversee the structural design at construction stage.
7	Product Liability & Warranties	Manufacturers insure their designs against injuries with insurance companies.	Difficult to get insurance companies to provide product liability insurance.
		Manufacturers can do product recall if the design is faulty and causes injury to users.	There is no recall and the Company must be trusted to be able to rectify any defects.
		Manufacturers provide the liability insurance.	The Owners/Architect/Playground Company is responsible in event of any accidents occuring due to the design.
8	Installation and Maintenance	Manufacturers produce installation and maintenance instructions.	Playground company usually produce an in-house installation and maintenance instruction on an ad-hoc basis.

Ropecamp puts safety of children first

opecamp,basedinBusan,Korea,isworking hard to develop playground equipments, which can have space-efficiency and safe play.

As users' demand of safety is upgraded, Ropecamp is producing all products to meet this demand according to international standard safety regulation – IPEMA, TUV, ASTM, CPSC, CSA. TUV are international test and safety certifying companies who provide services including products test and certificate.

The safety certificate of TUV proves the tested products' reliability. Ropecamp's products certified by TUV are tested by European safety standard EN1176 regulation.

It also certifies that those playground equipments are produced according to ASTM F1487 and CSA Z614.



Photo: © Ropecamp

Ropecamp is working hard to improve the products' safety and quality. Most of their products got TUV already tested and they will get certificate for more products. All of the company's R&D members are consisted of international safety regulation specialists and they understand correctly the contents of safety regulation requested by each continent. This makes all the company's products are perfectly safe. All the Ropecamp members always do their very best to produce safe and useful playgrounds equipments for the joy and fun of children.

Playpoint innovates, puts playground in cinema hall

stablished in 2001, Playpoint (Singapore) Pte Ltd is a renowned playground consultancy firm specialising in playground design and equipment. Innovation is at the heart of Playpoint's business and recently the company put a playground in a cinema hall.

As indoor playgrounds gain traction in building buzz for retail and commercial establishments, Golden Screen Cinema (GSC) conceived its first PlayPlus cinema playground in collaboration with playground specialist Playpoint at GSC The Mall, Mid Valley South Key in Johor Bahru, Malaysia. PlayPlus is GSC's new sub-brand that aims to entertain, empower and inspire audience through "edutainment".

Imagination is first sparked at the lounge's King Crawler. Kids imagine themselves exploring the cave-like play area



Photo: © Playpoint Malaysia Sdn Bhd

looking for treasures on different levels of the maze before finding themselves climbing up to the sparkly Gem Rock structure framed by a geometric shelter and sliding down to mark the end of their mission.

A core element of the design is to articulate bringing outdoor play indoors. To do this, designers for Playpoint's second cinema playground created a tree house along the steps of the theatre that acts as a hideout and secret meeting point for kids to meet and discuss their adventure plan. The journey begins walking through a "forest" and meandering across a wobbly but safe bridge before reaching a woodframed platform and making their way down a tube slide and into the ball pit. Taking into consideration the limited space provided for play, Playpoint's designers successfully fashioned a space-saving vertical playground while maximising the fun quotient.

ID Sculpture promotes unprogrammed play for childhood development

ased in Gunnison County, Colorado in USA, ID Sculpture is an industry leader in meeting the developmental needs of children through climbing activities. The company does this by combining carefully designed physical challenges with imaginative play and a commitment to its core principals. They believe that kids thrive when they feel an authentic sense of adventure and can safely explore their limits and nothing fosters learning like imagination.

Recently, the company supplied its playground equipment to Cook Inlet Native Head Start at Anchorage in Alaska. The Cook Inlet Native Head Start Project brought together numerous stake holders, all focused on providing the school with a play area that spoke to the heritage and culture of the region. A team of local educators, designers and manufacturers collaborated to adapt the architecture, boats and animals of the region into



Cook Inlet Native Head Start at Anchorage in Alaska, a project by ID Sculpture. Photo: g Ralph Kristopher Photography

an imaginative and fun environment that helps the community tell its own story.

At ID Sculpture, the company believes that unprogrammed play is key in childhood development, providing a safe place for children to interact with the world as they choose. Not only does this playground teach lessons of decision making and interpreting risk, but promotes strong identity and pride in the children that grow from there.

Retro-Max connects kids to outdoors with natureinspired playgrounds

tudies have found that children are smarter, more cooperative, happier and healthier when they have frequent and varied opportunities for free and unstructured play in the outdoors. However, societal trends such as handphones, e-tablets, Playstation Portables (PSP) result in children not spending enough time outdoors; leading to childhood obesity and stress.

To encourage kids to get outside to play, Landscape Structures Inc's "Play Naturally" is a line of nature-inspired playground equipment that aims to connect kids to Mother Nature. The playground shown in the photo is located in Punggol, Singapore. It consists of two PlayBooster Tree Houses for 2-5 years old children and 5-12 years old children



Sumang Walk Treehouse in Punggol, Singapore. Photo: $\ensuremath{\texttt{@}}$ Retro-Max Pte Ltd

respectively. Combined, they have twenty over play activities to engage children. The wooden components on the play equipment are actually made from concrete for easy maintenance and durability. They look very realistic and natural because impressions are taken from real trees and pressed onto concrete to mimic the real thing.

A good playground equipment is one that is safe, sturdy, durable and has many play components to engage and stimulate children. The "Play Naturally" line of nature-inspired playground equipment is available from Retro-Max Pte Ltd in Singapore.



Installing Large Format Tiles



Marco Albelice

Marco Albelice of Mapei SpA Technical Services Department, talks about the characteristics, problems and suitable products for installing large format tiles, which are in growing demand.

design, installation and maintenance instructions, which specifies the following: "...according to UNI 11493 standards [...], large format tiles are defined as those having one side longer than 60 cm".

For the purposes of this article, we will also consider tile formats of up to 3 metres, and which in certain cases may even exceed these limits, with a thickness of 3 to 6 mm.

Q: What are the most important factors when installing large format tiles?

Marco: There are two main factors to consider and they are movement and handling and the substrate.

1. Movement and handling: particularly large tiles are usually handled and moved around on site using suction cups and rigid support frames. These all help to stop tiles bending too much, which could lead to them cracking or even breaking. Handling large tiles also requires a proper number of operators.

2. The substrate to which large format tiles are bonded, particularly when using thinner tiles, must be perfectly flat. This requirement is applicable for the installation of floor and wall tiles in general, but it becomes even more critical when installing large format and slim ceramic tiles or stone slabs. If the installation surface is too uneven, it

could ruin the appearance of the finished covering or lead to cracking or breaking.

It is worth remembering that substrates on which ceramic tiles are to be bonded should be levelled off with a proper skimming or levelling compound (such as ULTRAPLAN, NIVORAPID, PLANITOP FAST 330 and similar products), and one should never just rely on the adhesive.

Q: What type of adhesive should we use to bond large format tiles?

Marco: The adhesive should be of the improved adhesion type and, in most cases (if not all!), it should also be deformable. Why? The larger the surface area of the tile, the higher the stress and amount of work the installation surface/adhesive/tile system will be subjected to. Natural deformations, or those induced by external events (such as temperature variations), could detach or damage the covering.

According to UNI 11493.1 standard, improved adhesion (class 2) and deformable (class S1 or S2) adhesive systems are recommended for ceramic tiles with one side measuring more than 90 or 120 cm. Deformable adhesives are characterised by their lower modulus of elasticity which makes them more efficient at "cushioning" strains caused by the different behaviour of the materials that make up the installation system.

arge format ceramic tiles cover a larger area, require fewer gaps and ■ breaks (grout lines and expansion joints, which are often overlooked) and create the illusion of a monolithic, seamless finish. The larger the tiles, the fewer the number of gaps or breaks in the ceramic covering. For many people, this is considered to be an advantage and is highly appreciated by architects and clients. As technicians, we should be asking ourselves: do we use the same installation system for large format tiles as the one used for small to medium size tiles? Are there any particular precautions we need to take?

Q: What does "large format tile" actually mean?

Marco: Are tiles measuring 30 x 30 cm or 40 x 40 cm classed as large formats? We could use common sense to answer this question but, if necessary, there is the Italian standard UNI 11493.1 – Ceramic tiles for walls and floors:

The latest technology enables tiles to be manufactured in formats and thicknesses which, until just a few years ago, were not available on the ceramic market. They are often reinforced by applying strengthening mesh on their back face and, in general, they have very low absorbency.

Class S1 and S2 adhesives guarantee particularly high levels of adhesion, so that even very large tiles made from porcelain (a material with very low absorbency) may be bonded successfully. Beside the adhesive, grout lines, expansion joints, the double-buttering technique and a correct assessment of site conditions are all fundamental aspects that need to be considered in order to install large format tiles successfully.

Mapei for large format tiles

In the wide range of Mapei adhesives, three products are especially suitable for installing large-format ceramic tiles and stone slabs:

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"The design of the nursing home is guided by the Catholic Welfare Services' philosophy of maintaining a person-centred home that upholds the values of human dignity."

- An interview with Michael Leong, Director, SAA Architects

SAA Architects (SAA), a member of Surbana Jurong Group, recently earned international acclaim for St. Joseph's Home (StJH) located in Singapore. It clinched a Silver award in the healthcare category at the World Architecture News (WAN) Awards 2019. Operated by Catholic Welfare Services, StJH provides nursing and hospice services for the elderly, regardless of race or religion. In this issue of SEAB, Michael Leong, Director, SAA Architects, shares the design approach of the nursing home, which puts the wellbeing of the occupants at the heart of its design. Photos: © Aaron Pocock Photography



Michael Leong

SEAB: Congratulations to SAA Architects! What does this mean to you and to your team and your company to receive this international award?

MICHAEL: Thank you! We are grateful for the win, but more importantly, the recognition of people-centric design that this award signifies. We are thankful to StJH for their guidance and the opportunity to be a part of this meaningful project – this award is theirs, as much as it is ours. May this project plant seeds for a more dignified aging!

SEAB: Why did you choose to enter the WAN Awards 2019 with this project?

MICHAEL: To us, this project clearly exemplified the WAN Awards criteria for the Healthcare category: "Championing human-centred designs that enhance not only the patient/ visitor experience but maximise operational efficiency and help improve patient outcomes – whether a hospital, clinic, care home or surgery."

SEAB: Can you explain to us the design approach for the St.

Joseph's nursing home? What challenges or constraints did you encounter in the entire project?

MICHAEL: The design of the nursing home is guided by the Catholic Welfare Services' philosophy of maintaining a person-centred home that upholds the values of human dignity. The architecture and landscape response imbues urban and universal design principles to create a space that not only enhances the patient and visitor experience, but also maximises engagement and operational efficiency for the care staff who run the home.

One of the main challenges was to retain in the new development the familiarity of the old home, which was a single-storey built environment in a lush, open, greenery-filled compound. The new home had to also be optimised for comfort of the residents and staff, while at the same time addressing the needs of each category of resident.

Our design response was to recreate this "ground-level environment" at every level, providing every resident the familiar experience typically found in a single-level compound. Negative spaces open to natural ventilation and



"The architecture and landscape response imbues urban and universal design principles to create a space that not only enhances the patient and visitor experience, but also maximises engagement and operational efficiency for the care staff who run the home."

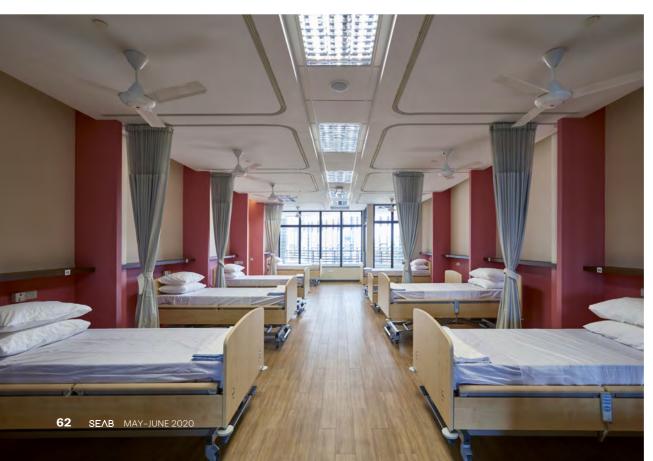
Michael Leong







"In terms of comfort for residents, we maximised natural ventilation, daylight and sun shading by orientating every ward at an angle determined by the prevailing winds and direction of sunlight." – Michael Leong







light are interspersed with communal spaces filled with greenery to recreate the lush "home in a garden" ambience. Nature-lined corridors serve as circulation circuits at each level and enhance accessibility for the bedridden and wheelchair-bound, regardless of the level on which they reside.

Residents can enjoy fresh air, sunlight and green views without having to leave their floors. This also aids staff in monitoring residents. In designing spaces that enhance seamless connections and mobility and accessibility, we







strive to respect the dignity of residents.

The redevelopment also involved retaining the existing chapel and an annex block. To retain the familiarity of the old home, our design positions the chapel – the spiritual heart of the home – at the development's centre; all communal pockets within the development are designed with vistas towards it, establishing the chapel as a beacon for the home. The materiality of the new development's facade – the terracotta screens – also creates a material connection to the chapel, which is clad in a similar tone of red brick.

In terms of comfort for residents, we maximised natural ventilation, daylight and sun shading by orientating every ward at an angle determined by the prevailing winds and direction of sunlight. We addressed the needs of each category of residents, paying special attention to those with dementia as they tend to be more sensitive to their environment.

At the Dementia level, there was one unique challenge we needed to overcome. With our "cluster and family" system, each floor plate was divided into three, seamless clusters. For these residents, however, each cluster was physically separated to allow better monitoring and care for the residents. The nursing staff needed means to access separate clusters without attracting unintended attention from curious residents, so we worked with the staff to design one of the supply stores to double up as a pass-through vestibule, allowing staff to freely access the various clusters.

SEAB: SAA designed and delivered the redevelopment of the 139-bed facility into an integrated 412-bed nursing home in 2017. How did you redevelop the facility? How did you expand or creatively adapt the space to fit 412 beds from the previous 139?

MICHAEL: From the original 139-bedded home, we required four storeys in order to accommodate just the Dementia and Aged Care residents. In striving to recreate the garden-like environment seen at the previous 139-bedded home, we ensured that all residents would have views to greenery from their bedrooms. To encourage residents to move about and interact with others, a looped walking path furnished with vibrant bougainvillea and plants encircles each floor to allow residents a track to walk along.

To maximise cross ventilation and thermal comfort for residents, all the rooms are aligned in a true north-south orientation. As a result of the true north-south orientation being rotated 45 degrees from our typical floor plate, our typical resident bedrooms adopted a staggered, saw-tooth configuration. Our design utilises the remnant spaces that result from the saw-tooth configuration for various uses; interior corridors are used for wheelchair storage, while pockets of space at the exterior allow residents to enjoy views of the garden without obstructing the main circulation path, regardless of whether they are in a wheelchair or bed.

SEAB: What type of green spaces have you included in the new design?

MICHAEL: Communal gardens, greenery-lined corridors, planters and vertical greenery are applied throughout the development to infuse pockets of green spaces on every floor. Hence, nature is accessible for even the bedridden and

wheelchair-bound regardless of the level they reside on. Residents can enjoy fresh air, sunlight and greenery without having to descend to the ground floor. The result is a "home in a garden" that recreates a domestic ambience conducive for rest and healing.

SEAB: What considerations did you have to keep in mind when designing for the home?

MICHAEL: In our first visit to St. Joseph's Home in 2014, we observed how the home's residents had close access to lush greenery – through the many cosy courtyards or the spacious, central garden, as well as the multiple footpaths that enabled residents of all physical capacities the chance to enjoy these landscapes. This left a strong impression on us, and in our endeavour to satisfy the home's need to expand its capacity to serve more residents, we focused on the how we could best recreate these experiences in a multi-storey environment.

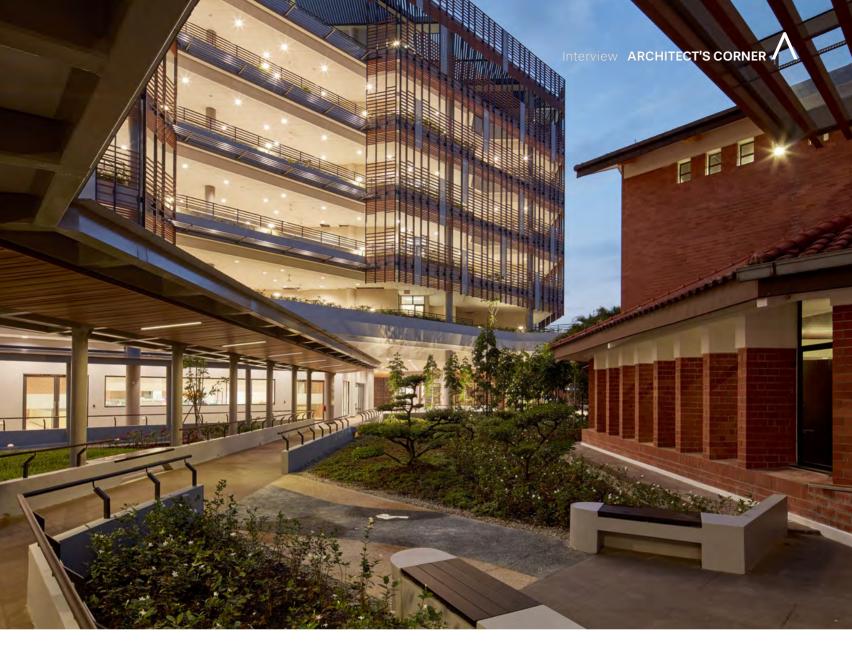
From the beginning of the project, our team's collective focus was always on creating a person-centred home – not another institutional facility. Together with Catholic Welfare Services and St. Joseph's Home, we investigated how both the design could improve the quality and efficiency of nursing care, as well as how the work flows of the nursing home care could complement the design. Our design took into consideration the larger organisational planning of the nursing home down to the individual clusters, and sustainability features we could incorporate to reduce energy usage and improve thermal comfort, as well as the materials used that would create this home-like environment.

SEAB: The architecture and landscape response imbues urban and universal design principles to create a space that not only enhances the patient and visitor experience, but also maximises engagement and operational efficiency for the care staff who run the home. What were some specific features that were added to achieve this?

MICHAEL: At the beginning of the project, we held a design charrette with St. Joseph's Home to review our proposal from the design competition. After numerous (and fun!) discussions and brainstorming sessions that considered the staff's workflows, daily timetables, and more; we refined our design further to create a "cluster and family" system formed by smaller groups of residents and staff, which respond to the home's philosophy and model of care. Doing so enabled the home to provide the correct scale for the home-like environment, while also allowing staff to better facilitate their care through closer and deeper relationships with residents. It also provided more familiarity for better monitoring, and an improved ability to manage residents in the event of an infection.

SEAB: St. Joseph's Home is the first in Singapore to integrate a childcare centre into a nursing home. Apart from the intergenerational playground, how is this demonstrated?

MICHAEL: At the first storey of the retained annex building, the home operates a childcare centre. As part of the intergenerational model of care, the home provides daily opportunities for the residents and children to interact with each other. The children also enjoy their lunch in the central



"We also role played as residents and tried to understand the experiences they were going through in order to better understand how we could create spaces that would enhance their daily living." – Michael Leong

dining area, which is also shared with the home's staff, visitors and some residents.

SEAB: How did you work together with the home to design facilities that would complement new services they wanted to introduce? Please give examples.

MICHAEL: Throughout the course of the project, we worked together with St. Joseph's Home to develop the design; via design charettes, sharing sessions, role playing, and visits to other homes. St. Joseph's Home was very open to our proposals and used this project as an opportunity to explore new models of nursing home care.

We also role played as residents and tried to understand the experiences they were going through in order to better understand how we could create spaces that would enhance their daily living. We stayed over at the home to experience first-hand what it was like to live there.

SEAB: When was the project started and when was it completed?

MICHAEL: The design competition was awarded to us in July 2014, and the home had its soft opening in Spring 2017. The home officially opened on 19 March 2018, the year of its 40th anniversary.

"Flexible workplaces will continue to grow and trend due to uncertainties in the market."

- An interview with Maria Nakamura, Head of Operations, Arcc Spaces

Maria Nakamura tells us how flexible workplace operators, including Arcc Spaces, are dealing with the COVID-19 outbreak in Singapore through precautionary measures.

SEAB: With the outbreak of Covid-19, people are putting their confidence in flexible workplace operators to take all precautions to ensure they feel safe in their spaces. How are flexible workplace operators dealing with the Coronavirus outbreak in Singapore?

MARIA: Our members put their confidence in us to take all precautions necessary to ensure they feel safe in our spaces. We are requiring all reception staff to wear masks, with hand sanitisers being made available at all our receptions. Cleaners have been required to wear mask and gloves, with gloves being replaced when moving from one section to another for cleaning. Temperature screenings are carried out for all tenants entering our flexible workplaces, unless building management is conducting it.

We have increased the types of disinfectants used, as well as cleaning frequency of the pantry area, public spaces, and meetings rooms. Cups and cutlery have been replaced with disposable versions, though we are also encouraging tenants to bring their own to be more environmentally conscious. Food items in our pantry have been covered in protective packets and no uncovered food is allowed on open display.

We have posted clear notifications in all our frequently-used spaces, such as meeting rooms, pantries, and other communal areas, informing tenants and guests that they have been thoroughly disinfected. Travel and health declaration forms for all external visitors to the centre are being enforced. Finally, detailed safety measurements checklists are submitted daily to ensure all precautions are being met without exception.

SEAB: How accessible are flexible workplaces to existing users now compared to before the outbreak of the Covid-19?

MARIA: Access to our shared offices remains the same as before, with the additional measure of temperature screening. Access for guests are conditional on compulsory submission of travel and health declaration forms. Tenants have been informed to update us if they have visited any of the affected cities in China, and if they have symptoms such as fever, coughing, or flu. Anyone with these symptoms will be declined entry until they have sought medical attention. Any such cases are brought to the attention of our centre manager as well as the tenant company.

We have an advantage in owning our spaces (buildings) at 75 High Street and Duxton Hill, which means we are able to control access and provide exclusive spaces to members and maximum dispersal of groups.



Maria Nakamura. Photo: $\ensuremath{\texttt{©}}$ Arcc Spaces

SEAB: What measures have been put in place for new people wanting to use such flexible workplaces?

MARIA: Due to the current coronavirus situation, the uncertainties have led to more enquiries in the last few weeks. We see more SMEs and even enterprises considering flexible workplace options due to flexible leasing terms. Also, they can move to another centre if there is a chance of one being temporarily closed down one (hopefully not). In flexible workplaces, businesses are able to take advantage of splitting their teams across multiple small private rooms, as opposed to occupying one large combined space.

Recently we rolled out a sanctuary plan with different packages to individuals, SMEs and enterprises who may need immediate workstations to support their business needs. We have three clients with headcounts of up to 20 employees, who have decided to



Rendering of Arcc Spaces' upcoming flagship flexible workplace at One Marina Boulevard in Singapore. Photo: @ Arcc Spaces

"We have increased the types of disinfectants used, as well as cleaning frequency of the pantry area, public spaces, and meetings rooms." — Maria Nakamura

split their operations across our centre and their existing office space. They are mainly in the finance and technology industries, and are seeking to avoid business disruption should their existing workplace be temporary closed down (hence are using us as a flexible back-up).

SEAB: What are your views on the long-term impact of the Covid-19 outbreak on co-working appeal?

MARIA: Flexible workplaces will continue to grow and trend due to uncertainties in the market. Unlike traditional offices, service providers like Arcc Spaces offer flexible lease terms and access to other centres in case of disruption to our some of our spaces. Also, with ready-to-use spaces, furniture, amenities, customer services and high-speed Internet, members can start working immediately by bringing their own laptops. With flexible lease terms, companies can expand or

trim down quickly to meet their business needs.

Though remote working is popular, some industries require high security and privacy to protect their data and network. As such, remote working (that is from home or a café) is not always suitable. Through our partnership with Cisco Meraki, Arcc Spaces provides high security, reliability and privacy to our members. In terms of security, the system adheres to PCI Data Security Standards, helping customers to build and maintain a secured network to protect data, maintain a vulnerability management programmes, implement strong access control measures, and monitor network security.

Working from packed offices, however, does increase the chance of getting an infection. Arcc Spaces provides our members the option of splitting their teams across multiple small private rooms, working in common coworking area, or at different centres which are closer to their homes.



Architects, engineers, and construction professionals tell us how they are responding to the crisis.

he global building and construction industry has also been hit by the outbreak of COVID-19. Delays in construction projects and labour shortages are some of the many challenges that building and construction professionals are facing right now. At the heart of these challenges is addressing the safety of their staff and clients as well as ensuring that business continues with minimal disruption. In this issue, architects, engineers and designers tell us how they are responding to the COVID-19 situation and what kind of impact will it leave on their business and on the architecture industry as a whole.

Yang San Go, Managing Director, Aurecon Singapore



Yang San Go. Photo: © Aurecon

Your firm's response to COVID-19

In addition to implementing business continuity measures, Aurecon's global Executive Leadership Team now meets three times a week to co-ordinate our response to on-going developments. We also communicate daily with our company Medical Director at International SOS and monitor advice from local authorities. The latest advice on health hygiene and other developments is communicated to all staff once a week and we maintain a COVID-19 resource hub on the company Intranet, which is accessible to all staff.

In addition, we recognise that the situation may cause some to feel anxiety. They are referred to our employee assistance programme, which offers free, confidential and professional counselling service to all employees and their immediate family members.

In Singapore, our crisis response team, which includes Senior Management, Legal, Health and Safety, HR and Communications, meets at least twice a week to monitor the situation and implement the necessary measures to ensure that our employees remain healthy and safe with minimal disruptions to our clients and projects.

Changes in office working patterns

In Singapore, we have implemented split teams and other flexible working arrangements. Social distancing has been put in place for those working in the office. We have business continuity plans in place and this includes enabling our offices around the world with additional IT tools so that they are able to support each other, in the event of a temporary closure.

Impact of COVID-19 on your business and the architecture, engineering and construction industry as a whole

The biggest impact to the engineering and construction industry is project delays due to shortage of construction materials and workers from China and Malaysia. Some clients have also put on hold certain non-critical projects and this will eventually have a knock-on effect on our business in terms of opportunities, operations and cashflow.

Lambert Ma, Director, LWK + PARTNERS

Your firm's response to COVID-19

Our firm's response to the COVID-19 pandemic has been phased due to the constantly evolving nature of the situation. Flexibility is key to our approach by which we have adopted remote office in the first instance followed by flexi-hour work arrangement when the situation has become less volatile. Being a global practice, the timing and level of implementation vary from office to office depending on the office locale. But overall as a practice we have suspended business travels and encouraged using video conference as the prime means of communication with clients and collaborators in lieu of face to face meetings. We understand this is uncertain and anxious time for many people, it is therefore important to communicate and listen to the feedback and concerns of our staff in our response to the pandemic. It is also our duty as a practice to stay educated and proactive in implementing health and safety measures for the wellbeing of our staff in the workplace.

Changes in office working patterns

The call for social distancing as a means to hamper the spread of viral infections has affected how and where we work in response. Remote access and communication Lambert Ma. Photo: © LWK + PARTNERS



capabilities are the two key areas of high demand in our effort to adapt remote office where we have to ramp up our facilities and support quickly. The ability to access to files and digital drawings is essential to staff working from home, which is achieved by cloud servers and private VPN network. The implementation of remote office has created a variety of disruptions to usual workflow. Certain staff have cited slowness and instability of internet services as a major drawback working from home. This results in their spending more time completing certain tasks. Remote office has also altered the normal teamwork dynamics in which an additional layer of communication such as phone calls and social network is needed to maintain the connectedness and synergy among team members.

Team leaders may find it necessary to adopt different managerial protocol in order to maintain the discipline and work pace of their teams. Video conferencing has been a popular alternate to face to face meetings. With the advent of more sophisticated telecommunication software, the results have been largely satisfactory to clients and collaborators alike. We feel that this is one possible area which will become habitual even after the decline of the pandemic.

Impact of COVID-19 on your business and the architecture industry as a whole

The outbreak has no doubt posed great challenges to the architectural industry as a whole but as a business it has presented us a tremendous opportunity to rethink the accepted norm and traditional modes of working that may require a proper shake up. The disruptions caused by the outbreak does come with a positive aspect by which the transitioning of our business to a full-on cloud based and mobility enhanced infrastructure will inevitably be accelerated. Remote communication capabilities, cloudbased files storage and access and BIM applications are just a few ways that architectural offices should come to adapt and upgrade to meet the challenges of the modern era such as the pandemic crisis that we are now facing.

In an effort to stem the spread of the Coronavirus, mandated quarantine, banning of non-essential travels and closure of borders imposed by authorities around the globe have become commonplace. Border crossing especially in mainland China where we have a large number of projects has become a problem thus making restrictive working on remote projects in which meetings on location and site visits are required.

As a global practice with many offices and diverse teams, we have managed effectively to negate this "border" problem and thus render it "border-less" by relying on our local representatives in different offices to cater to the needs of being physically available to clients and projects. In moment of crisis such as this, it makes inter-office collaboration all more relevant and we believe we will see an increased effort in this to tackle the challenges ahead.

Raymond Hoe, Director, Scott Brownrigg, Singapore Studio



Raymond Hoe. Photo: © Scott Brownrigg

Your firm's response to COVID-19

The wellbeing of our staff, clients and industry partners together with business continuity are our primary focus and as such we have set up a COVID-19 Task Force who meet daily and provide regular updates and guidance to our teams across our global network of studios. Our Singapore studio remains open however the team are social distancing and refrain from all required site meetings where possible. In addition, the studio has also established contingency plans which includes full IT support should the team need to be evacuated from the office and work from home immediately.

Changes in office working patterns

We have implemented flexible working patterns and work locations through the use of our technology systems and remote system access which includes REVIT and BIM modelling, which allows staff to work at home or come into the office outside of rush hour. Staff can as work from home voluntarily if they choose to.

Impact of COVID-19 on your business and the architecture industry as a whole

Inevitably we are experiencing a slow down within the market. Many clients are putting the commission of new projects on hold, and construction sites are closing to ensure the wellbeing of site workers. We choose to remain calm and vigilant during this period and we are ready to continue to work from home

when the need arises. With high hopes that the COVID-19 will be transient, we are leveraging this period not only to reconnect within the office to spur one another to increase productivity and innovation, we are also in touch with our clients and consultants to discuss creative topics on how architecture design can be relevant and meaningful post-COVID. For example our Design Research Unit are diverting all their efforts into researching how future architectural design can minimise the spread of contagions.

This initiative has been instigated by Scott Brownrigg CEO, Darren Comber who states: "The Architectural design profession has a crucial role to play in addressing the issue of preventing the spread of disease through the spaces we inhabit and the materials we use in construction. Can the design of future buildings and environments provide

one of the key solutions to both human behaviour and the spread of contagions? We believe the profession has a duty to respond to this question and explore ways that can deliver a more positive future".

From research into the current trends in building densities, shapes and forms through to material science and nano-technology that not only looks at the value and properties of historic materials — copper, brass etc. but also into emerging self-repairing and self-cleaning materials using organic nano-biotic robots. If we can coat metals in PV coatings, what other coatings can we use to protect and resist virus spread? The research will also explore automation of processes and prediction modelling using digital twins for not just buildings but whole urban environments.

James Miner, CEO, Sasaki

Your firm's response to COVID-19

Sasaki established a COVID-19 management team on Friday, March 13, composed of operations leaders and that same day migrated our Boston headquarters to a remote work model and ceased traveling for project work. Daily video calls with the operations leadership team ensure policies and procedures are updated to enable employees to seamlessly adapt to the remote work environment. Employees are not traveling nor returning to the physical office until further notice, but for the time being are complying with Massachusetts Governor, Charlie Baker's advisory for businesses to work remotely until at least April 7.

During this period, communications to employees, clients, and partners is of critical importance. As CEO, I have committed to writing daily updates to our employees about Covid-19 and Sasaki's evolving response as new information comes in. In addition, my team and I have put together an FAQ document to catalog all our policies and recommendations in one place for employees to reference. I crafted a letter to clients and partners that was distributed by project leaders over the March 14 weekend and the same letter was translated to Chinese as well, posted to our website, shared with our entire external contacts via an email blast, and shared on social media channels over the last week to ensure our key stakeholders around the world know we are prepared with a well-executed



James Miner. Photo: © Sasaki

response to this global pandemic. We are actively thinking through our crisis response and communications plans to anticipate a number of scenarios should they arise.

We also recognise this is a challenging time for many in our extended community. We made a \$10,000 USD donation to the Boston Resiliency Fund and are currently exploring if/how we can support on 3D printing critical medical supplies in short supply.

Changes in office working patterns

As of Friday, March 13 the Sasaki headquarters in Boston moved to a remote work model, at which point every employee was issued a laptop (if they didn't already have one) within 24 hours of the announcement of Sasaki's remote work policy. The firm already had Zoom conferencing in place and established Slack as an additional communication channel for seamless communication and culture building. Sasaki is committed to the supporting our culture and the well-being of our workforce virtually. One example of this commitment is through Sasaki's offering of virtual fitness opportunities. Previously, yoga sessions and group fitness classes were held at Sasaki's office two days a week, and since Sasaki's move to working from home, our HR team coordinated with the instructors to now offer the classes online. Additionally, remote socials, shared lunch hours, and slack channels — inviting employees to share photos of

pets, loved ones, and their new home workstations – have kept spirits high.

With regards to client collaboration, one of Sasaki's clients reached out over a weekend recently, wanting a few new design aspects added to their space, and Sasaki organised a remote client call to address the requests. While traditionally, the Sasaki team would have brainstormed together and began sketching with pen and paper, teleworking has required Sasaki to adopt creative solutions. In this instance, Sasaki's team utilized an iPad with sketching software, shared the design for feedback across the team, and is now translating the sketch into 3D drawings to be shared with the client. This example demonstrates Sasaki's flexibility, and the ways in which the company is reinventing the creative, collaborative design processes given the current climate.

Sasaki also had an interview for a new project out of state that instead took place over video. The project principal and the team interviewed with the client via Zoom video conference. And just this week, we learned we won that project, which was particularly rewarding given the hurdles the team overcame to compete for the project in this current context.

Work sessions with clients are also continuing with new workarounds. Our interdisciplinary teams are a huge advantage when creative, quick innovation is needed to serve our clients. Designers and our in-house team specializing in developing data and design tools banded together to find a new way of conducting a remote visioning session with a group of 12 clients from 12 locations (along with the Sasaki team members). Sasaki utilised the tool, Miro, in combination with a new proprietary digital tool developed in-house just for this purpose, to allow for "hands-on" interaction with "post-its" and images. The team's ability to host this work session keeps the project timeline on-track, a win for both the client and Sasaki. We are now applying this approach on other projects in need of interactive teaming capabilities while remote.

For those construction sites still open in markets around the world, Sasaki designers are working with construction managers to develop standard protocols for managing projects through construction during this time, like limiting the number of people on a construction site at any one time to allow for proper social distancing, looking into doing video punch lists, and other new protocols.

Impact of COVID-19 on your business and the architecture industry as a whole

In commercial markets, we are seeing temporary holds on construction in some cities – like Boston – which will have lasting effects on construction jobs and ultimately, the costs of construction. It's going to take a while to recover and things won't look "normal" for quite some time within the design and construction industry.

Colleges and universities are already massively impacted, and it will be interesting to see if this experience with remote learning moves more people into online learning worldwide over the long-term. If students don't return to campuses in the same way post-pandemic, there will be a huge financial impact to campuses. So anyone who operates in higher education will be need to think differently about their delivery model and we expect institutions will be looking for new ways to adjust their campuses to meet new realities over the next several years.

The main takeaway is it is going to take a while to recover and we will all have to work together, creatively, to find new paths forward. The good news for Sasaki is that we entered into this crisis with a strong backlog and were able to get remote working set up quickly and efficiently. And, Sasaki's main asset for economic resilience is the diversity of our portfolio – we operate in a variety of market sectors and across a broad geography. Firms that provide highly specialized services, especially smaller firms that may also operate in a limited geography, will likely be face the greatest hurdles ahead. As China and other major centers of commerce in Asia Pacific begin their recovery in earnest, we are starting to see an uptick in business opportunities – a very welcome sign. Our Shanghai office is thankfully returning normal operations as well. U.S. firms like ours that have offices on the ground in China will see a distinct advantage over those that would have to travel to be onsite. We are grateful to be in the diversified position we are in, but certainly look forward to achieving normalcy again as soon as we are all safely able.

Ben van Berkel, Founder and Principal Architect at UNStudio and Founder of UNSense

Your firm's response to COVID-19

Our priority is of course to safeguard our employees, our business, and our running projects, but also to play our part in society at large. So while we remain fully operational and are doing everything within our power to keep to our project deadlines, everyone from our Amsterdam and Frankfurt offices has been working from home for the past two weeks and will continue to do so for as long as is deemed necessary. Our architects and designers have all been provided with the tools they need to carry on working on their projects, albeit remotely. We are making continual use of our integrated technology and systems, including video conferencing, remote data and systems, as well as providing

access and other collaborative tools. There is also a strict protocol in place for those who need to visit the office briefly to pick up items that are not available on the servers, such as post.

Changes in office working patterns

Working patterns have not changed as such, however extra attention has had to be paid to ensuring continuous and fluid communication amongst the teams.

Impact of COVID-19 on your business and the architecture industry as a whole

I was impressed by how smoothly the transition to working from home went, and how well everything is operating. The teams stay in constant communication and the mood is very positive and productive. However, this is an exceptional situation and nobody can accurately predict the consequences of this crisis. We are however a 'healthy' company. Over our 30+ years of practice, we have learned to react to change quickly, whilst also planning for rebound scenarios. We also approach such challenges as opportunities to re-imagine different scenarios that could be put in place, should the economic situation change following recent events. I can also imagine that the way we work, communicate, and practice architecture



Ben van Berkel. Photo: © Els Zweerink

will change in various ways; that people's priorities will shift and design will become more human.

Meena Krenek, Principal and Interior Design Director at Perkins and Will's Los Angeles Studio



Meena Krenek. Photo: © Perkins and Will

Your firm's response to COVID-19

Well-being is one of our firm's core values, so the health of our staff, clients, and project partners is of paramount importance to us. As the world continues to learn more about the impact of the novel Coronavirus (COVID-19), we've decided to take precautionary steps to help ensure the wellness and safety of our teams. Our teams across the globe are working remotely. Collectively, we have virtual daily huddles to connect with our colleagues and clients to ensure their physical and mental wellbeing. Our design mindset and experience in healthcare design continue to impact our society globally. Our teams are working around the clock with our clients to be able to quickly adapt existing medical facilities to accommodate patients with COVID-19.

Changes in office working patterns

As a firm, our ability to work remotely seems even more effective than we expected. We are experiencing new ways of engaging with coworkers and clients. It is a unique experience – using virtual calls allows us to share more personal information and build deeper connections as we connect virtually and come together during this crisis. When groups of people unite around a common cause, advancements happen in our society. We need to continue to inspire, provide mental safety, and help support

the feeling of fulfillment every single day for our staff and clients alike. Our commitment to advancing the world through impactful and purposeful design continues to bring us all together regardless of our current situation.

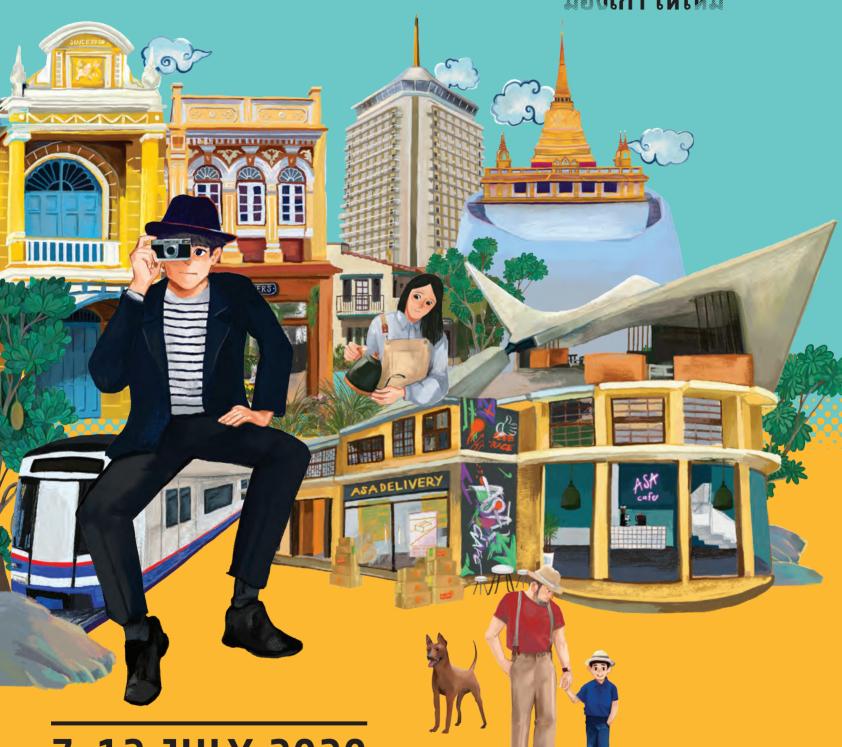
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We have invested in one of our industry's most sophisticated technology platforms, allowing us to maintain uninterrupted service delivery. In short, we are equipped with everything we need to execute our work for clients and partners in a timely manner, no matter where we are, while continuing to meet our professional standards. We are well positioned to continue supporting our clients and communities, and assist in continuing to provide a high level of design thinking and design strategy across the globe. It is hard to say what the next few days, weeks or months will bring, but I do know Perkins and Will is equipped to use design to continue to elevate our society and support the human experience and well-being on many levels.

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Archidex 2020	1 - 4 Jul 2020	Kuala Lumpur	Malaysia	www.archidex.com.my	75
Architect Expo 2020	7 - 12 Jul 2020	Bangkok	Thailand	https://asa.or.th/architectexpo	74
Futurebuild Southeast Asia (SEA) Expo	20 - 22 Oct 2020	Kuala Lumpur	Malaysia	www.ecobuildsea.com	76
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