CONSTRUCTION+

Bringing The Building And Design Industry To You

JUNE 2018 | ISSUE 13 | RM25 | SGD10
PP19040/06/2016 (034532)
MCI (P) 100/12/2017

CELEBRATING EXCELLENCE

BCI ASIA AWARDS 2018

TOP PROJECTS IN MALAYSIA, SINGAPORE & BEYOND

DESIGNING FOR SUSTAINABILITY, VITALITY AND HISTORY

TERREAL

ZEN TILE SERIES

Conceptualizing architecture

The Zen Tile Series establishes a new standard of roofing aesthetics, with its unique smooth surface, a refined and elegant bevelled nose, making it the ultimate flat roof tile for modern architecture. The Zen Tile Series could also be installed continuously on exterior walls as an alternative wall cladding, creating unique and elegant "cocoon" style roofs.

Visit us at

ARCHIDEX

4 - 7 JULY 2018 (BOOTH NO: 4F425)

KUALA LUMPUR CONVENTION CENTRE

TERREAL

Building Beauty

Scan with your smartphone to visit our website

www.facebook.com/terrealasiapacific/

www.terreal.com.my

JOTUN

Paint for iconic buildings and beautiful homes

Since its beginnings in 1926 in Sandefjord, Norway, Jotun has grown into a leading worldwide brand today, attaining numerous global recognitions along the way. With the amount of research and dedication poured into every drop of Jotun paint, no wonder many of the world's most iconic buildings, including the Eiffel Tower in Paris, as well as millions of beautiful homes, are painted by Jotun.

Jotun Paints (Malaysia) Sdn. Bhd. (824636-K)
Jotun (Singapore) Pte. Ltd.

jotun.com.my / jotun.com.sg Jotun Malaysia / Jotun Singapore

CONSTRUCTION+

Bringing The Building And Design Industry To You

PUBLISHED BY
BCI Asia Construction Information Sdn Bhd
Unit 1106, Block B
Phileo Damansara II
Jalan 16/11, Section 16
46350 Petaling Jaya, Selangor
Malaysia
t (603) 7661-1380
f (603) 7661-1381
e (editorial) construction@bciasia.com

EDITORIAL TEAM
managing editor Candice Lim
senior editor Joanna Sze
assistant editor Lim Yi Zuo
contributing editor Aylwin Chooi

GRAPHIC DESIGNERS
Muhammad Syahmi Mohamad Asmari; Bazura Zulkiffli; Hans Lim

ADVERTISING
Lee Loong Fei; Louis Lee; Selina Foo
e (Malaysia) malaysia@bciasia.com
e (Singapore) l.lee@bciasia.com; s.foo@futurarc.com

PRINTER
Yamagata (Malaysia) Sdn Bhd
Lot P.T. 1661, Nilai Industrial Estate,
P.O. Box 9, 71809 Nilai, Negeri Sembilan
t (606) 799-2814
f (606) 799-8060

www.facebook.com/constructionplusasia/

@ConstructionPlusAsia

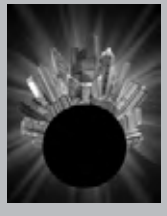
@CPlusAsia

Download the free Construction Plus App on Google Play or the App Store

GET IT ON Google Play

Download on the App Store

Publication frequency: Quarterly (4 issues per year)



COVER CREDIT:
Montage of some projects
by BCI Asia Awards 2018
Malaysia Winners

CONSTRUCTION+ SUPPORTING ASSOCIATIONS

Construction Industry Development Board (CIDB) Malaysia
(www.cidb.gov.my)

Dewan Bandaraya Kuala Lumpur (DBKL)
(www.dbkl.gov.my)

Institute of Landscape Architects Malaysia (ILAM)
(www.ilamalaysia.org)

Malaysian Association of Facility Management (MAFM)
(www.mafm.org.my)

Malaysia Green Building Confederation (MGBC)
(www.mgbc.org.my)

Malaysian Interior Industry Partners Association (MIIP)
(www.miip.com.my)

Malaysian Timber Industry Board (MTIB)
(www.mtib.gov.my)

Ministry of International Trade and Industry (MITI)
(www.miti.gov.my)

Waste Management Association of Malaysia
(www.wmam.org)

Royal Institution of Surveyors Malaysia
(www.rism.org.my)

The Federation of Malaysia Hardware, Machinery & Building Materials Dealers' Association (FMHMBA)
(www.mhmba.org.my)

Royal Institution of Chartered Surveyors
(www.rics.org/ASEAN)

American Concrete Institute – Singapore Chapter (ACI-SC)
(www.concrete.org.sg)

Interior Design Confederation Singapore (IDCS)
(www.idcs.sg)

International Facility Management Association (IFMA) Singapore Chapter
(ifmasingapore.org)

Landscape Industry Association of Singapore (LIAS)
(www.lias.org.sg)

The Singapore Contractors Association Ltd (SCAL)
(www.scal.com.sg)

Singapore Building Materials Suppliers' Association (SBMSA)
(www.stas.com.sg/members/sg-building-materials)

Singapore Environment Council (SEC)
(www.sec.org.sg)

Singapore Electrical Trades Association (SETA)
(www.seta.org.sg)

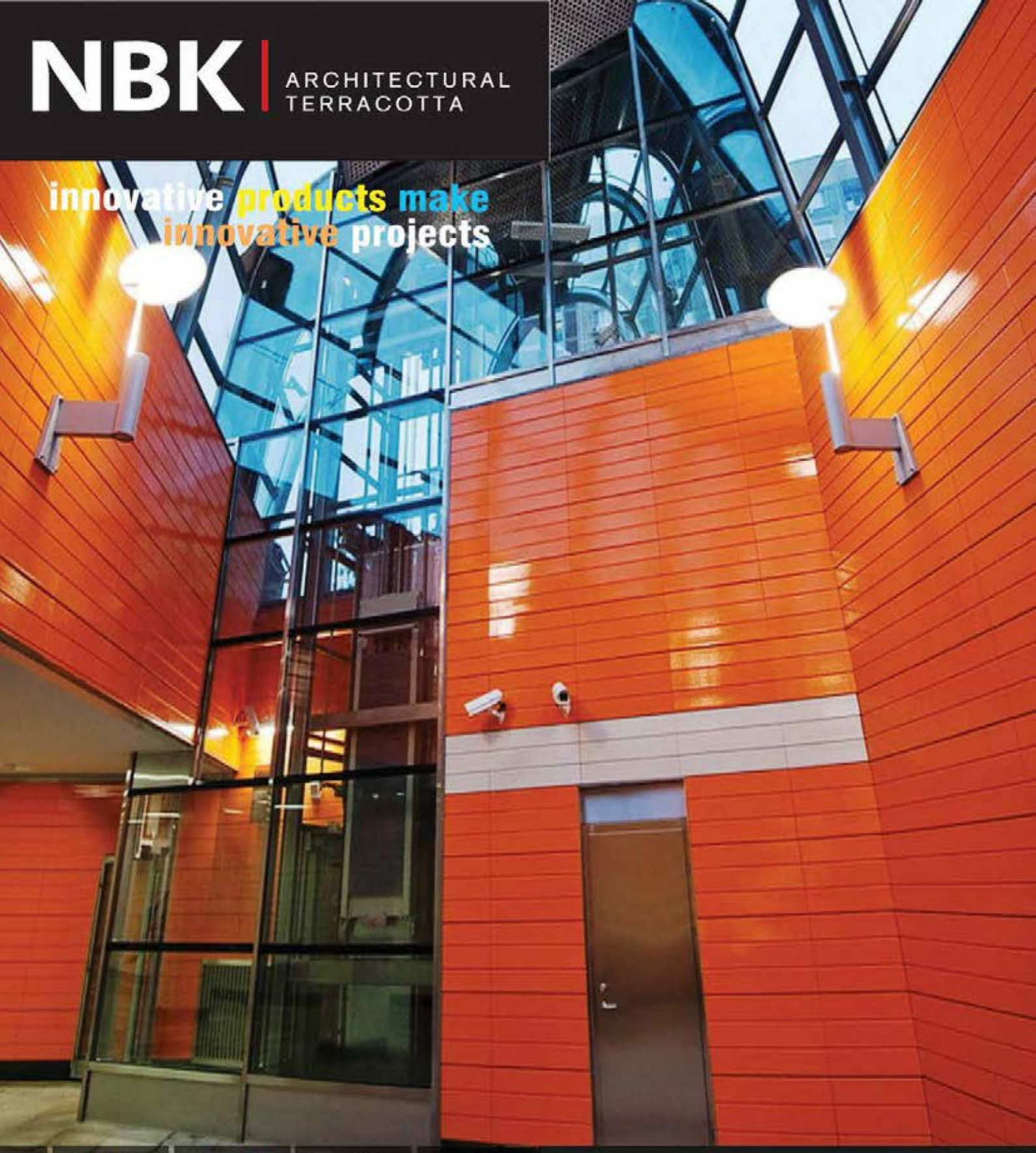
Society of Interior Designers Singapore (SIDS)
(www.sid-singapore.org)

Singapore Manufacturing Federation (SMF)
(www.smfederation.org.sg)

SEA Drymix Mortar Association
(www.seadma.org)

Security Systems Association of Singapore (SSAS)
(ssas.org.sg)

NBK | ARCHITECTURAL TERRACOTTA



ENERGY SAVINGS

THERMAL CONTROL

PRECISION ENGINEERING

ZERO WASTE

HunterDouglas
Architectural

HUNTER DOUGLAS SINGAPORE PTE LTD
Email: hds@hunterdouglas.com.sg
Established in Singapore 1965

FOREWORD

First of all, on behalf of the Society of Interior Designers, Singapore (SIDS), I would like to congratulate BCI Asia for its *Construction+* magazine.

SIDS began as a professional body for Singaporean and Singapore-based interior designers in 1994. As a non-profit organisation governed by law, the society not only has to protect the standards of professionalism of interior designers and to resolve industry issues, it also has the duty to promote the creativity and expertise of Singapore's interior design Industry on the global arena.

Interior design is not only an important discipline in the design industry but also an integral part of the construction industry. There has always been a misconception between interior designers and interior renovators, as well as interior decorators. In short, an interior designer is a professionally trained individual who is paid a fee to design and/or enhance a given space or a series of it. Similarly, architects who design interior spaces must not treat interior design as an add-on complimentary service because interior design is a respected profession on its own!

Besides the creative aspect of the job, competent interior designers have to possess an in-depth understanding of the materials and fabrication techniques, and in some cases, the construction methods for the designs created. In today's competitive regional market, it is also important for interior designers to keep themselves updated with new products and techniques through publications and even advertisements!

Thus I applaud *Construction+* for taking the initiative to fill this important role of providing interior designers in Singapore and the region with regular news, articles and information to keep practitioners on a competitive edge. The magazine will act as an important bridge between interior designers and suppliers, renovators, contractors and other related vendors.

Last but not least, I wish *Construction+* all the best, and call for all interior designers in Singapore and the region to give them their full support, because a bridge will only be useful if people use it. Thank you!

Keat Ong
President, Society of Interior Designers, Singapore
Managing Director, Nota Design Group

ISWA
International Solid Waste Association

WMAM
WASTE MANAGEMENT ASSOCIATION OF MALAYSIA

ISWA 2018 World Congress
Kuala Lumpur, Malaysia

22-24 October | Kuala Lumpur Convention Centre

KUALA LUMPUR, 22-24 OCTOBER

The vibrant and cosmopolitan Malaysian capital of Kuala Lumpur will host the ISWA 2018 World Congress featuring a world-class technical programme, designed to advance scientific and technical knowledge for sustainable solid waste management addressing the theme of Sustainable Consumption towards Waste Minimization.

#ISWA2018 #LETSTALKABOUTIT

iswa2018kl | iswa_2018kl | @ISWA_2018KL | iswa2018.org

FOREWORD

A staggering 3.5 billion people—that's half of the world's population—lack access to organised waste disposal facilities.

In countries with municipal waste management systems, about 70 per cent of the waste collected are not recycled or used as an alternative energy resource. The Global Footprint Network reports that we are now in an ecological deficit—it is taking Mother Earth one year and six months to regenerate what we use in a year.

Sustainable waste management is a strategic approach that covers all sources and aspects of waste management—from generation, segregation and transfer, to treatment, recovery and disposal in an integrated system—with an emphasis on stakeholder participation and resource recovery.

Malaysia, like most developing countries, is coping with the challenges of a growing population, high consumption and energy demand. In Malaysia, waste is expected to reach 16.76 million tonnes by the year 2020. In 2016, we produced an average of 38,000 tonnes of solid waste daily, of which 15,000 tonnes were from food waste alone.

However, we are making progress by shifting to a greener trajectory—Green Growth—which will ensure sustainable socioeconomic development. Firstly, Malaysia has ratified its commitment in Agenda 21 at the United Nations Framework Convention on Climate Change and The Kyoto Protocol to position sustainability as a fundamental basis for its continued growth and development.

In 2007, the government passed the Solid Waste Management Act, transferring executive authority on solid waste management and public cleansing in Peninsular Malaysia from the local authorities to the federal government. Enforced on 1 September 2011, the act positioned Malaysia as the first country in the world to federalise solid waste management. In September 2015, household waste separation commenced in six states and two Federal Territories.

Since the challenge of waste management affects every person and institution in society, there is a need for a collective approach to waste challenges and the involvement of a broad range of stakeholders in their implementation.

This is why we are very excited to announce to *Construction+* readers that Kuala Lumpur will be hosting the International Solid Waste Association (ISWA) World Congress in 2018. Themed Sustainable Consumption towards Waste Minimisation, the congress addresses our current rate of rapid consumption and waste and will look at the implementation of integrated systems to reduce waste generation and the role of effective project management in tackling this global crisis.

I look forward to seeing all of you at ISWA World Congress 2018 so that we can all work together towards a sustainable and sound waste management in Malaysia!

Ho De Leong
Chairman, Waste Management Association of Malaysia


Promat
PASSIVE FIRE PROTECTION
One Stop Solution Provider
Boards | Firestopping | Structural Steel Protection
Promat (Malaysia) Sdn Bhd
(Company No.: 46882-A)
Unit 19-02-01, Level 2, Wisma Tune, No.19, Lorong Dungun
Damansara Heights, 50490 Kuala Lumpur
T: +603 2095 5111 F: +603 2095 6111 E: info@promat-ap.com
www.promat-ap.com
etex building performance

EDITOR'S LETTER

Dear readers,

Welcome to our bumper issue of *Construction+*.

They say the road to excellence is always under construction. And as a magazine, we continuously strive to become better. This issue marks the synergistic fusion of the Malaysian and Singaporean editions of *Construction+* to give you a more diverse, more engaging and more insightful read into the region's building and design industry.

We also shine the spotlight on BCI Asia Awards 2018—recognising those who have significantly contributed to the local built environment. Check out our coverage of the Singapore awards event on page 45 and the Malaysian winners on pages 54 and 95.

The Top Ten Architects and Developers Awards 2018 honour the most active firms in seven Asian territories—Malaysia, Singapore, Hong Kong SAR, Indonesia, Thailand, the Philippines, and Vietnam. These are chosen based on the greatest total value of projects under construction in 2017, weighted by the extent of their sustainability efforts (as measured by BCI Asia's project leads research and confirmed WGBC-accredited Green building ratings certifications).

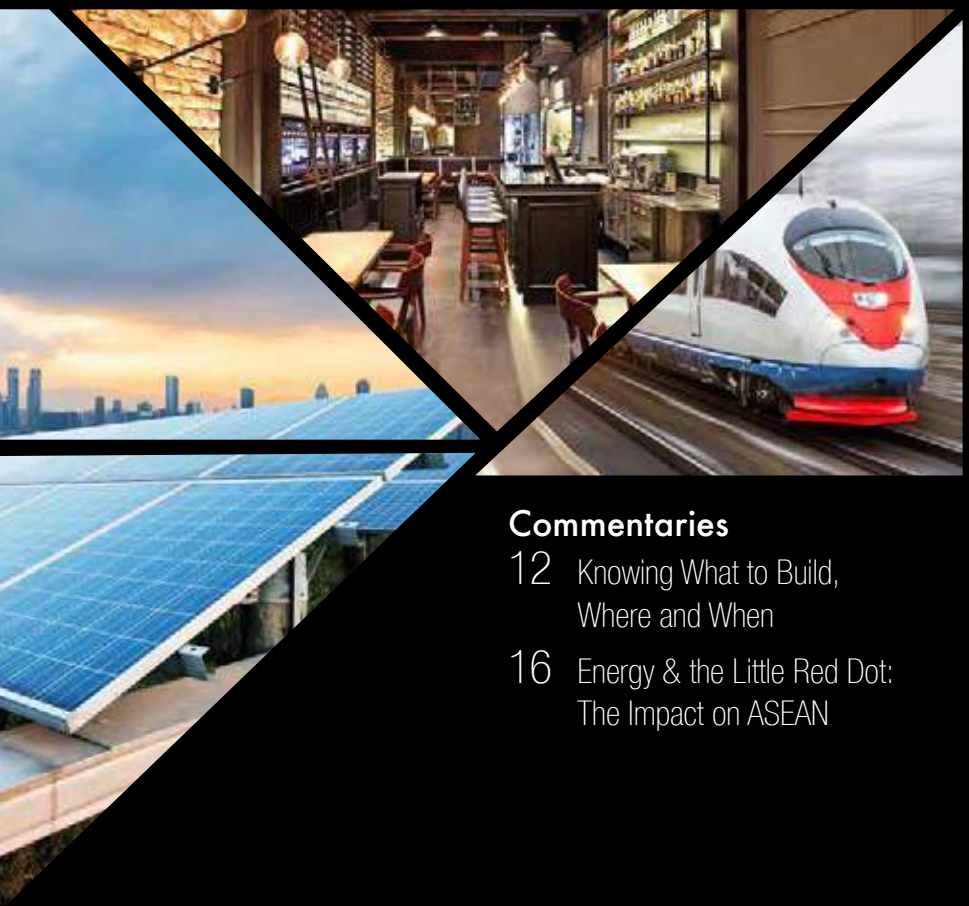
The BCI Asia Interior Design Awards 2018 recognise distinctions in interior architecture—designs that stand out aesthetically, functionally and ergonomically. Check out a Malaysian entry that sets itself apart as a hip, vibrant and sustainable youth volunteer centre (page 96). We also feature several winning interior projects from Thailand, from resorts to luxury residences and a fresh lifestyle office.

In other pages, we look at the importance of integrated waste management, Singapore's role in the region's energy sector, the preservation of what used to be one of the biggest leprosy settlements in the world, and the largest sewage treatment plant in Asia Pacific that doubles as a sprawling pubic park.

It's been an exciting ride, and we look forward to a more thrilling chapter ahead with all of you. Share your thoughts and feedback with us as we work towards becoming the read of choice in Malaysia, Singapore and beyond.

Thank you. And to our Muslim friends, Selamat Hari Raya!

Joanna Sze
Senior Editor



Rigorous market analysis is paramount before embarking on any property development

KNOWING WHAT TO BUILD, WHERE AND WHEN

The importance of market analysis in the local building and development industry

BY DR HISHAMUDDIN MOHD ALI

The emergence of the digital revolution has made information accessible and exposed to the property market. It has socially affected the way of thinking and expectations, with regard to decision making in acquiring personal goods, including property assets. Clearly, the behavioural changes of the property market players complicate the environment and understanding of property ownership and investment.

The property market in Malaysia has shown some significant changes over the past couple of decades, from home ownership to investment, with property now becoming a significant and strategic asset class. This shift has resulted in more sophisticated property products, expanding towards long-term investments and new lifestyles.

However, we must not disregard property as a necessity and a basic need, especially for those in the bottom and middle 40 per cent (B40 and M40) income groups. Therefore, a balanced market analysis must consider the wide spectrum of the built environment, without leaving out any gaps that may result in unbalanced development with high market inefficiency. Other infrastructure assets, such as transportation, communication, water, energy and sewerage, must also be part of the market analysis to establish a holistic view in the justification to build.

UNDERSTANDING THE MARKET

For the builders/developers, the decision of property development is dependent on 'the market, the market and the market'. So in this current property market, the questions on most developers' minds are: What to build? Where about? And what would be the best timing?

Market analysis may hold the answers.

A balanced market analysis must consider the wide spectrum of the built environment, without leaving out any gaps that may result in unbalanced development with high market inefficiency.

Market analysis is a systematic way of investigating and examining the supply and demand for a specific type of property, at a specific locality and point in time. Market analysis is paramount before embarking on property development, and no compromise should be granted without proper and rigorous property market analysis.

The main components of market analysis comprise the following:

- Description of the proposed project
  The first part of a market analysis is the details of the project, such as evaluation of the site and its surroundings, legal and planning constraints and other general economic factors. The project description is important to ensure that the project will not cross the boundary of development requirements.

- Study of demand
  Future expectations may be affected by population growth trend, household income, employment, family size, taxes, financing facilities and interest rate, and lifestyle. The key indicators are population growth and household income, which may indicate a specific demand of certain property products or public assets that are needed within the specific area.

- Study of supply
  The current supply of property assets should be analysed to ensure no redundancy of the proposed project. This also includes the supply of similar projects under construction and competition within the same property product class or public assets. Cost of capital, labour and land are also important as part of evaluating the project viability.

- Evaluation and conclusion
  Based on the findings of the above three components, the critical reviews will be outlined and a conclusion drawn to assist decision makers on whether a project should proceed or not.

As property products are internally controlled by various laws, such as the National Land Code, Local Government Act, Town and Country Planning Act, Strata Management Act, Strata Title Acts and many more, buyers and sellers cannot directly influence the market prices. Moreover, these acts actually influence the location of the subject land and property.

For example, location factors for residential development can be analysed by examining the proximity to the economic centre, such as transportation costs and travel time, as well as accessibility and public transport.

In market analysis, the demand factors for residential property development must consider the new household formations, age composition of new and current households, household income and financing conditions. The household income, family structure and new expectations must be analysed to estimate the appropriate demand.

Concurrently, supply factors consist of development components, including development charges, building material costs, building technology, current and future stocks and credit conditions for developers. These demand and supply factors must be matched to provide a decision of what to build, at the suitable location and at the right time.

LOOK BEFORE LEAP

Generally, any physical and non-physical development must undertake market analysis. At least two sources of data are mandatory for market analysis, viz. communities/stakeholders survey, information gathered from reports and published documents.

The construction of hospitals, schools, housing, transportation infrastructures, such as airport, highway and mega infrastructure projects, such as the high-speed rail (HSR) and the East Coast Rail Link (ECRL) must be justified through comprehensive market analysis to ensure the expected returns can be realised.

We should not simply spend and build infrastructure without anticipating and addressing the future benefits—not only monetary, but also social and environmental. The intangible benefits may comprise stakeholders' satisfaction in the functions and services provided from the property and infrastructure assets, while tangible benefits

Mega infrastructure projects have to be justified through market analysis to ensure expected returns can be realised

It is important to ensure the quality and reliability of the data and measurements employed for the analysis.

We should not simply spend and build infrastructure without anticipating and addressing the future benefits.

include cost savings (monetary and in kind), income maximisation and value.

The risk factors also have to be taken into account—unique risk, such as location, type and physical aspects of asset, and market risk, which include fiscal changes, legal, political and planning requirements. Therefore, prioritisation of any property and infrastructure projects is paramount.

Market preferences and behavioural changes have become increasingly important factors as the trend of contemporary lifestyles may not necessarily depend on types and location with the emergence of Industrial Revolution 4.0. For example, with the advent of flexible workplaces, do we still need more offices, infrastructure assets or even teaching spaces in the university?

Another purpose of market analysis is to improve market efficiency. The demand of property and infrastructure assets should match the supply and vice versa for a beneficial efficient market.

Currently, most of the market studies have been conducted by private companies and organisations; obviously, the main aim is to maximise shareholders' wealth. For public agencies, market analysis must be made compulsory by the respective ministries for any development projects, whether for maximisation of return or for public accountability. For example, to develop a school, market analysis must be undertaken on the current need, site analysis, accessibility and population pattern to justify the location and size of school.

Government agencies should also conduct market analysis when there are applications from developers for property development. The approval must not merely comply with the planning and legal requirements but must also be able to capture the local housing need and affordability levels. This is important to help reduce the gap between the housing need and supply.

The Valuation and Property Services Department, Ministry of Finance, divisions in each local authority should be used for the development approval process at the state level. This is not a matter of restricting the property market or prohibiting economic development, but as a safeguard for public interest.

The main concern now is to understand the property market's preferences and to translate these into property products that would match future demand and expectations. Hence, it is important to ensure the quality and reliability of the data and measurements employed for the analysis.

PROFESSOR SR DR HISHAMUDDIN MOHD ALI
Director
Business Management Division
Office of Deputy Vice Chancellor (Development)
Universiti Teknologi Malaysia (UTM)

Dr Hishamuddin Mohd Ali is professor of Property Asset Management in the Faculty of Geoinformation and Real Estate at UTM. He holds a PhD in property investment and finance from the University of Salford, United Kingdom.

He is actively involved in property research, having led many research and consultancy projects and published in various publications and proceedings. He has been appointed as a consultant for many projects in real estate valuation, market and feasibility studies for more than 30 years. His research interest covers asset management strategy, property market dynamics, investment and valuation.

He is a member of the European Real Estate Society (ERES), International Association of Certified Valuation Specialists (IACVS), Royal Institute Surveyors Malaysia (Property Surveying Division) (RISM) and the Malaysian Institute of Professional Property Managers (MIPPM).

HENNER®

Sustainable Walling Solutions

CIDB IBS CERTIFIED

AUTOCLAVED AERATED CONCRETE

22 YEARS* AND COUNTING

OVER 170,000,000 AAC SOLD

4 HOURS FIRE RATINGS

* Manufactured by Senawang factory to Malaysia and Singapore market

AUTOCLAVED AERATED CONCRETE BLOCKS

DESIGNED AND TESTED TO THE HIGHEST STANDARDS

Thank you for making HENNER the leading manufacturer in autoclaved aerated concrete (AAC) in Malaysia and Singapore. We are committed to maintaining the highest standards in our AAC blocks.

50% LIGHTER & COST SAVING

Reduces foundation and structural costs by as much as 25% and 10% respectively in high-rise structures.

ACOUSTICS & INSULATION

HENNER products offer better sound insulation owing to its porous concrete content.

2X FASTER INSTALLATION

HENNER - 22 m^2/worker/day
6 Bricks - 10 m^2/worker/day
HENNER - 75 m^2/worker/day
25mm plaster - 20 m^2/worker/day

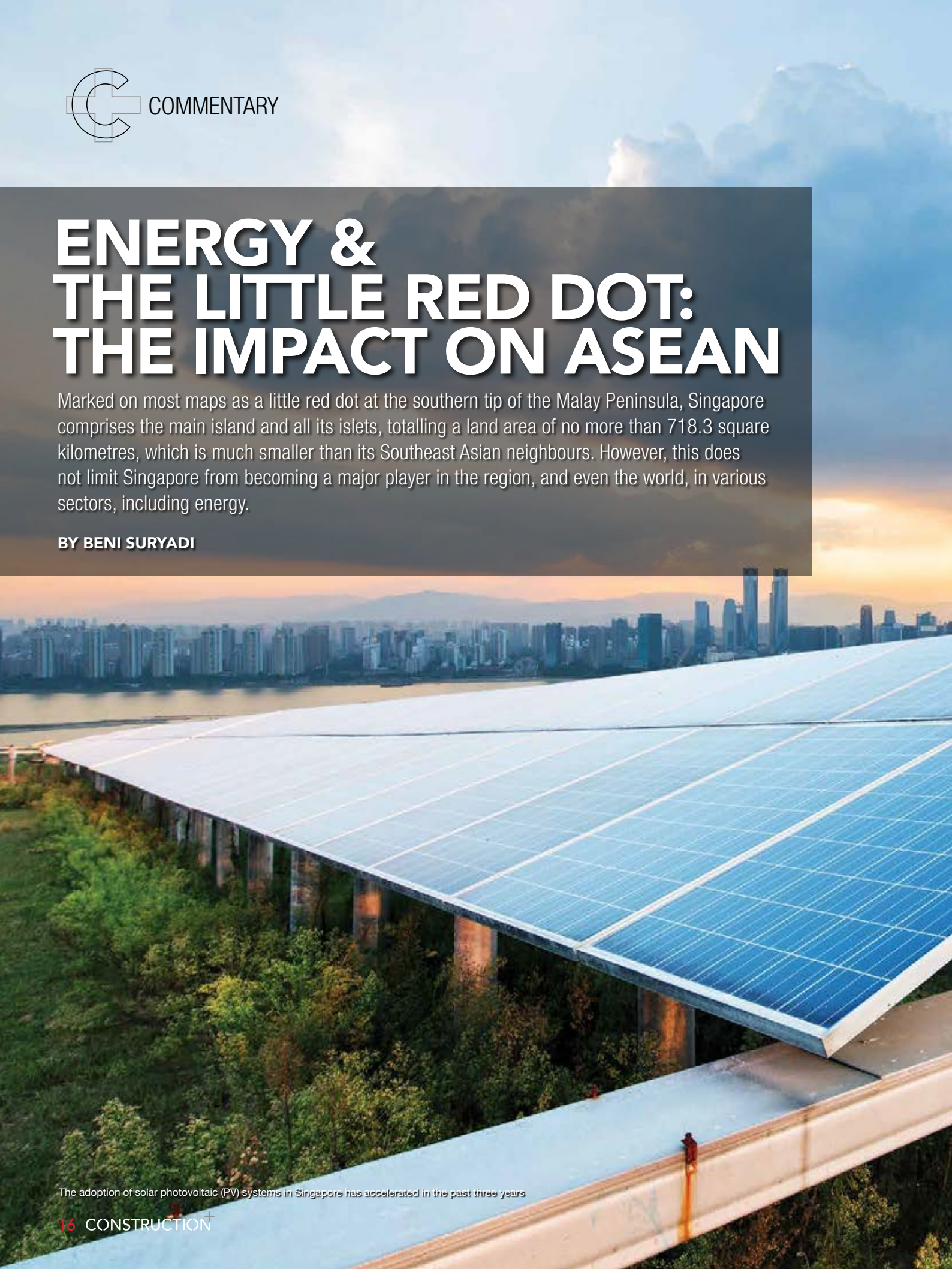
CALL +603 5567 9119 | WWW.HENNER.COM.MY

KIM HOE THYE INDUSTRIES SDN BHD (849519-K)

ENERGY & THE LITTLE RED DOT: THE IMPACT ON ASEAN

Marked on most maps as a little red dot at the southern tip of the Malay Peninsula, Singapore comprises the main island and all its islets, totalling a land area of no more than 718.3 square kilometres, which is much smaller than its Southeast Asian neighbours. However, this does not limit Singapore from becoming a major player in the region, and even the world, in various sectors, including energy.

BY BENI SURYADI



The adoption of solar photovoltaic (PV) systems in Singapore has accelerated in the past three years

Srinagarind Dam in Kanchanaburi, Thailand

Long known as the first in the region to have a waste-to-energy power plant in 1979, Singapore now deploys and integrates new technologies to transform its energy landscape.

In 2015, Singapore consumed about 15 million tonnes of oil equivalent (Mtoe), merely about 4 per cent of the region's total final energy consumption (TFEC). Nearly all of it was imported to meet domestic energy demand, as it has no fossil resources, while its renewable energy potential is also limited. To maintain its ranking among the world's most competitive economies, it is crucial for this small city-state to ensure that economic growth is supported with competitively priced and reliable energy supplies. Hence, Singapore's overall energy policy framework aims to maintain a balance of policy objectives—namely economic competitiveness, energy security, and environmental sustainability—known as the 'Energy Trilemma'.

Over the years, the government has been constantly providing and enhancing policies and supporting regulatory frameworks, allowing the private sector to actively participate in moving towards sustainable energy. Back in the early 1970s, the largest oil refinery in the region started its operation in Singapore, a country with no oil resource at all. But then this refinery—still the largest in the region—along with two more refineries (amounting to about 1.35 million barrels per day) became the main source of oil products for neighbouring countries, such as Cambodia, Indonesia and Vietnam. When natural gas gained its momentum, Singapore started the construction of a SGD1.7 billion liquefied natural gas (LNG) receiving terminal in 2010. Singapore has raised its initial throughput capacity of 3.5 million tonnes per annum (Mtpa) to around 11 Mtpa. This plan will not only secure the supply for domestic demand, where more than 90 per cent of Singapore's electricity is generated from imported natural gas, but it will also allow Singapore to become the hub for physical LNG trading and regional redistribution.

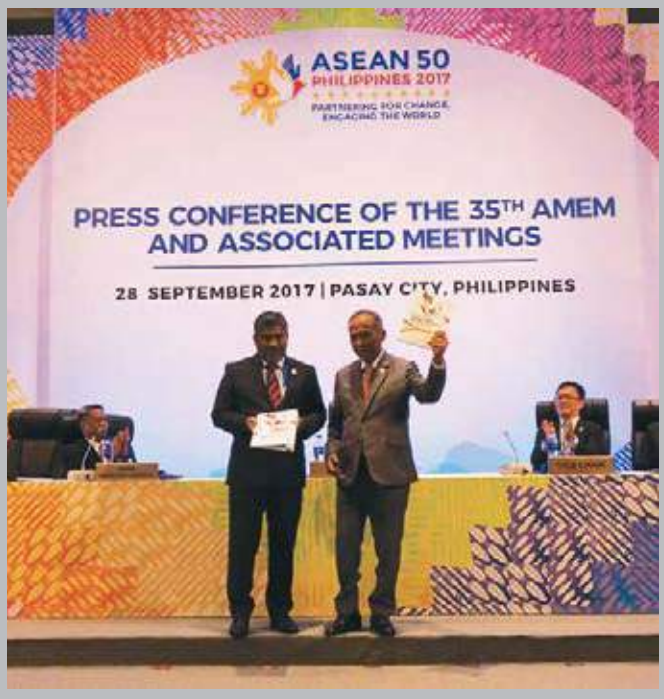
The progress of the oil and gas sector does not only occur at the national level. Singapore also actively contributes to the development at the regional level. The electricity exchange between Plentong in Peninsular Malaysia and Woodlands in Singapore is the first regional cooperation in electricity interconnection, which has now become the backbone of the ASEAN Power Grid (APG). Singapore is also a member of the Lao PDR, Thailand, Malaysia and Singapore Power Integration Project (LTMS PIP), the first regional initiative in multilateral electricity trading. The Energy Purchase and Wheeling Agreement (EPWA) of

Singapore, together with Malaysia, also initiated the 5-kilometre pipeline from Malaysia to Singapore in 1991, under another ASEAN flagship project, the Trans-ASEAN Gas Pipeline (TAGP).

Phase 1 was signed in Manila, the Philippines, in 2017. Singapore, together with Malaysia, also initiated a 5-kilometre pipeline from Malaysia to Singapore in 1991, under another ASEAN flagship project, the Trans-ASEAN Gas Pipeline (TAGP). As of 2017, Singapore is connected to about one third of the total 3,673-kilometre TAGP.

At the same time, efforts in renewable energy are also escalating. Long known as the first in the region to have a waste-to-energy power plant in 1979, Singapore now deploys and integrates new technologies to transform its energy landscape. The adoption of solar photovoltaic (PV) systems in Singapore has accelerated in the past three years. Grid-connected installed capacity of solar PV systems sharply increased from 25.5 MWac in 2014 to 46.0 MWac in 2015, and subsequently to 99.9 MWac by the end of the first quarter (Q1) of 2017. This increase was driven by 955 new installations in 2016 and in Q1 2017, resulting in a total of 1,898 solar PV installations across Singapore. The country has also established the Solar Energy Research Institute of Singapore (SERIS) at the National University of Singapore (NUS) as the national institute for applied solar energy research, focusing on technologies and services to harness the full potential in solar.

Efforts in energy efficiency (EE) are also showing the same progress. Improving EE is recognised as a key strategy to help achieve the three objectives of the country's energy policy. To improve EE in Singapore, the government has established an Energy Efficiency Programme Office (E2PO). The office has developed a national plan known as Energy Efficient Singapore (E2 Singapore). This plan includes promoting the adoption of EE technologies and measures; building capacity and expertise in energy management; raising public awareness on energy efficient behaviours; and research and development (R&D) in EE technologies. Having a robust financial system also helps Singapore to boost the establishment of various



This year, 2018, as part of their ASEAN chairmanship, Singapore will also host the 36th ASEAN Ministers on Energy Meeting (AMEM) and Associated Meetings, as well as the ASEAN Energy Business Forum (AEBF). This ministerial meeting will be held for the first time together with the Singapore International Energy Week (SIEW) from 29 October to 2 November 2018. SIEW is an annual platform for energy professionals and policymakers to discuss and share best practices and solutions within the global energy space. The 36th AMEM and AEBF will bring together ASEAN Dialogue Partners to advance key regional energy initiatives and strengthen public–private partnerships. At this junction, Singapore's chairmanship is timely to bring ASEAN energy sector towards energy security, accessibility, affordability and sustainability for the region, as aimed by the ASEAN Plan of Action for Energy Cooperation (APAEC) 2016–2025, the energy blueprint of the ASEAN Economic Community.

The deployment and integration of new technologies, and the growth in energy demand are transforming the energy landscape.

energy services companies (ESCO). As the country develops best practices in EE across different sectors, it has also developed a pool of ESCOs with good track records and references that are able to provide services outside its shores, allowing them to be scaled up in the neighbouring countries.

The little red dot's energy system may be different from others in the region, where most countries are still using the vertical integrated system with state-owned utilities and oil and gas companies. Singapore is introducing the liberal market with private sector's active participation. Its efficiency and clarity in creating a good business environment for stakeholders is a crucial lesson that other ASEAN member states could adopt. The deployment and integration of new technologies, and the growth in energy demand are transforming the energy landscape. To facilitate this transition, it is important to address the capital market barriers and foster an enabling environment for infrastructures investment. Policymakers, investors and industry leaders must ride this wave of opportunity to invest, innovate and integrate energy systems for a more resilient energy future.

Oil and gas industry refinery in Labuan, East Malaysia

BENI SURYADI
Manager
Policy Research & Analytics
ASEAN Centre for Energy

Suryadi leads the Policy Research & Analytics (PRA) department of the ASEAN Centre for Energy (ACE), an intergovernmental organisation within the Association of Southeast Asian Nations' (ASEAN) structure that represents the 10 ASEAN member states' interests in the energy sector.

The PRA assists in fulfilling ACE's function as a regional centre of excellence that builds a coherent, coordinated, focused and robust energy policy agenda and strategy for ASEAN. It provides policy recommendations for the region in achieving the member states' collective goals under the umbrella of the ASEAN Plan of Action for Energy Cooperation (APAEC) 2016–2025, which is the energy blueprint of the ASEAN Economic Community.

HILTI

AS UNIQUE AS 50 YEARS AGO

Hilti power tool technology

50 years ago we launched our first drill hammer, the Hilti TE 17. It immediately transformed concrete drilling due to its breakthrough electro-pneumatic hammering mechanism. Ever since then, we've continued to bring pioneering innovations to the market.

We created the world's first cordless rotary hammer, the Hilti TE 10-A and the first cordless combihammer, the Hilti TE 30-A – enabling chiseling for the first time with a cordless drill hammer.

All Hilti tools are backed up by our services, including our Hilti Fleet Service, our unique repair service, or advice and training – all designed to help to make your jobsite safer and more productive.

Click on the QR code to view a special editorial celebrating 50 years of Hilti technology.

T 6777 7887 | Hilti Far East Pte Ltd | 20 Harbour Dr, #06-06, S117612 | Singapore www.hilti.com.sg

IBN INTERNATIONAL™

Official Endorser:

MINISTRY OF INTERNATIONAL TRADE AND INDUSTRY

SMART FACTORY 4.0

MAN MACHINE CONVERGENCE

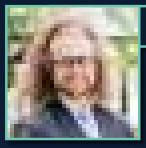
According to General Electric, the smart factory concept could be worth **$10 -15 trillion** to global GDP over the next 20 years.

17th - 19th JULY 2018

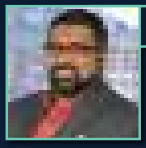
BERJAYA TIMES SQUARE, KUALA LUMPUR

Main Conference: 17th & 18th July 2018 | Post-Conference Master Class: 19th July 2018

INDUSTRY EXPERTS



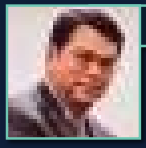
PETER ROGERS
Additive Manufacturing
Autodesk
Japan



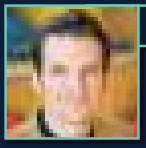
DATO' CM VIGNAESVARAN
Chief Executive
HRDF
Malaysia

DOMINIC GORECKY
Head of Swiss Smart Factory
Switzerland Innovation Park
Biel/Bienne

DR.-ING THOMAS DORN
CEO Asia
TLD
China



LEONARD JAYAMOHAN
Director
Hitachi Consulting
Singapore



TIMO SCHNEEMANN
Vice GM
ROI Management Consulting
China

And Many more...

200+ ATTENDEES | **20 INDUSTRY EXPERTS** | **3 DAYS NETWORKING**

Supported by:

KASPERSKY lab | Rockbay | HRDF | AUTODESK | TLD | Hitachi Consulting | elliance | CyberSecurity MALAYSIA

Media Partner:

Industrial automation | BCI ASIA | CONSTRUCTION+

For enquiries and registration: Call: 603 9206 5800 | Fax: 603 9200 7946 | Email: ibn@intel-biznet.com

You're invited to INTERMAT ASEAN 2018

ASEAN INTERMAT

THE SOUTHEAST ASIAN TRADE SHOW FOR CONSTRUCTION AND INFRASTRUCTURE

6 – 8 SEPTEMBER 2018

IMPACT Exhibition Center, Bangkok, Thailand

Why visit?

All-inclusive construction and infrastructure trade platform

Discover over **300** companies

Meet and network with **5,000** decision-makers

Get updated on industry's latest treads and regulations

Visit international pavilions : China, Singapore, Korea, India, The UK, German, France

Participate in Business Matching Programme

Register online now

Asean.intermatconstruction.com/visitors-registration/mbcil

For more information, please contact info@asean.intermatconstruction.com /+66 -2-833-3318

Organizers: COMEXPOSIUM IMPACT

Co-host:

#intermetasean

ASEAN.INTERMATCONSTRUCTION.COM

2018 MGBC DINNER AND AWARDS

Date: 11 May 2018
Company: Malaysia Green Building Confederation (MGBC)

Themed Building Lasting Changes, the 3rd MalaysiaGBC Leadership in Sustainability Awards Night was held at the Setia City Convention Centre, Setia Alam, to recognise leaders in the Green building industry.

Award winners include Brunsfield International Group (Business Leadership in Sustainability Award); Menara Pejabat Kementerian Perdagangan Antarabangsa Dan Industri (MITI) (Leadership in Sustainable Design and Performance Award); and Ar Serina Hijjas (Women in Green Building Leadership Award).

The winners of this biennial awards will be offered the opportunity to represent Malaysia at the Asia Pacific World Green Building Awards competition.

MGBC President Ir Ahmad Izdihar Supaat giving an address at the start of the event

MGBC board members

Some of the award winners

TRENCHLESS ASIA 2018

Date: 7–8 May 2018
Company: Westrade Group Ltd

This is the second time Malaysia has hosted Trenchless Asia, the major international gathering for trenchless technologists from 22 nations to meet and discuss the latest industry developments.

The two-day event consisted of a conference and an exhibition with some 110 exhibitors showcasing viable underground utilities construction solutions for developed and developing cities.

Datuk Seri Ir Dr Zaini Ujang, Secretary General, Ministry of Energy, Green Technology and Water Malaysia, delivered the keynote address for the conference.

Trenchless technology involves underground utility and construction works (such as the mass rail transit and light rail transit projects) with minimum surface disruption—an environmentally and financially sound alternative to traditional excavation techniques.

"As the population expands around the world and with the trend of urbanisation, as well as with the increasing numbers of deteriorating pipes that are currently in the ground, the immediate need for new pipelines that can carry more capacity, and the increasing environmentally-sensitive green environmental areas, trenchless techniques are going to continue to evolve and become more necessary," says Peter Smeallie, executive director of the International Society for Trenchless Technology (ISTT).

Guests of honour checking out a Trenchless Asia 2018 exhibit

Opening ceremony of Trenchless Asia 2018

METRICS GLOBAL WINS BIG AT ASIA PACIFIC PROPERTY AWARDS

Date: 4 May 2018
Company: Metrics Global

Metrics Global walked away with three interior design awards, including a Five-Star award for the Hotel Interior category for its Impiana Hotel Senai project, at the 2018–2019 Asia Pacific Property Awards 2018 in Bangkok.

Its other two awards were for the interior design of the Apartment at One Stonor Residences and Show Home Intercontinental Show Suite.

"It is truly amazing with winning of all entries, and we appreciate the great effort by the team, and also the opportunity provided by the organiser," said managing director Jackal Chua.

The awards are part of the International Property Awards and drew more than 900 entries. The awards presentations also played host to the IPAX Asia Pacific property industry exhibition on 3–4 May.

Winning project Impiana Hotel Senai

Jackel Chua (second from right) at the awards ceremony

MLAA10

Date: 21 April 2018

Company: Institute of Landscape Architects Malaysia (ILAM)

ILAM recently hosted the 10th edition of the Malaysia Landscape Architecture Awards (MLAA) in recognition of excellence in landscape architecture.

More than 67 awards were presented to winners of the eight award categories—professional, (landscape design, landscape analysis and study, and young landscape architect), landscape contractor, developer and GLC, researcher, government and student, as well as two new categories, international entries and landscape supplier or manufacturer. These were chosen from the 165 entries submitted from Malaysia and Singapore.

The MLAA is part of a wide array of activities organised by ILAM in conjunction with the World Landscape Architecture Month celebration in April, which aims to introduce the profession to a larger audience and create greater visibility of the growing role of landscape architects in the outdoor built environment.

"Over the past 10 years, we have witnessed changing trends in landscape architectural design and practices and have marvelled at the way in which these trends have altered our landscape spaces and cities, and shaped our living environment," says Associate Prof Dr Osman Mohd Tahir, President of ILAM.

ILAM also announced that Malaysia will host the International Federation of Landscape Architects (IFLA) World Congress 2020, to be held concurrently with the World Landscape Architecture Summit. The event will play a key role in the formulating of the New Landscape Architecture Agenda 2050.

ILAM President Dr Osman (left): Over the past 10 years, we have witnessed changing trends in landscape architectural design and practices

Upcoming Event

ARCHIDEX 2018

Date: 4–7 July 2018

Companies: Malaysian Institute of Architects (PAM); C.I.S Network Sdn Bhd

The 19th International Architecture, Interior Design & Building Exhibition (ARCHIDEX) will be held at the Kuala Lumpur Convention Centre. The trade event expects 550 local and international exhibitors and 36,000 visitors from the region. It will be held in conjunction with the annual Kuala Lumpur Architecture Festival (KLAF).

This year's highlights in the new exhibit zone include Building Smarter—Integrated Building System (IBS), and Building on Cleaning—Building Maintenance & Cleaning Services, which will showcase sophisticated technologies to maintain buildings in good order.

Since 2014, ARCHIDEX has also featured the Eco Building & Design Exhibition (ECO-B), a platform to explore the growing global interest in environmentally responsible buildings. ECO-B features Green building technologies, designs and solutions, local governmental legislations and incentives, Green building assessment tools and rating consultations.

Upcoming Event

7TH ANNUAL MODULAR & PRECAST CONSTRUCTION

Date: 24–26 July 2018

Company: Trueventus

This year's event at the JW Marriot Hotel Kuala Lumpur puts the focus on modern methods of construction, namely dynamic prefabrication.

The plenary sessions examine topics such as dimensional control techniques, industrialised building systems, environmentally-sustainable procurement, lean manufacturing, volumetric modules, productive collaboration, financial models, and streamlining of materials providers and manufacturers.

The four-stream programme—off-site construction, design and engineering, project management and manufacturing essentials—is packed with presentations and case studies by both local and international speakers.

A full-day workshop by Amy Marks, president of XSite Modular Consulting, will cover rapid prototyping and decision-making benchmark for prefabrication.

The 19th ARCHIDEX expects to draw 36,000 visitors

MARK THE DATES

4-7 JULY 2018

KUALA LUMPUR CONVENTION CENTRE

AN EVENT OF

KLAF2018

KUALA LUMPUR ARCHITECTURE FESTIVAL

ARCHIDEX®

THE 19TH INTERNATIONAL ARCHITECTURE, INTERIOR DESIGN & BUILDING EXHIBITION 2018, MALAYSIA

FEATURING

ECO-B®

ECO BUILDING & DESIGN EXHIBITION

CONCURRENT EVENTS

>DATUM:KL

INTERNATIONAL ARCHITECTURE AND DESIGN CONFERENCE 2018

>DATUM+

DESIGN PLUS SYMPOSIUM

>DATUM:GREEN

SUSTAINABILITY DESIGN FORUM

JOINTLY ORGANISED BY

PAM

CIS

ENDORSED BY

MATRADE

Malaysia External Trade Development Corporation

SUPPORTED BY

MINISTRY OF WORKS, MALAYSIA

MGBC

OFFICIAL AIRLINE

malaysia airlines

OFFICIAL AIRPORT TRANSFER

KLIA ekspres

PREMIER PARTNER

Johnson Suisse

Bathroom Solutions

STAY CONNECTED WITH US!

ARCHIDEX

ARCHIDEX TV

ARCHIDEX APP

Available for download on:

App Store

Google play

www.ARCHIDEX.com.my

SCAN HERE TO REGISTER FOR A HASSLE-FREE ENTRY INTO THE HALLS

BuildTech Asia 2018

International Building Technology Expo

Enhancing Construction Productivity Through Digital Transformation

Like us on "BuildTech Asia"

22 – 24 OCTOBER 2018 | SINGAPORE EXPO, HALL 3 & MAX Atria

2017 ACHIEVEMENTS

12,500 sqm
Gross Exhibition Space

10,548
Trade Visitors

41
Visiting Countries

Unlimited Opportunities

International Pavilion
Expand your Brands Presence

Sponsorship
Leverage on Vast Network and Business Connections

Booth Enquiry

Ms Oh Li Ling
T: +65 9776 7477
E: lingoh@sph.com.sg

BOOK YOUR PREFERRED BOOTH SPACE NOW!

Organised by: sphere exhibits, A SUBSIDIARY OF sph

Strategic Partner:

Supported by: Building and Construction Authority

Supporting Organisations: esda, IFMA Singapore Chapter

Media Partners:

Digital Media Partner: TRADECARDS GLOBAL

Co-located Event: FMSE

Partnering Event: FMC FACILITIES MANAGEMENT CONFERENCE 2018, 16 & 17 AUG | SINGAPORE, SMART FM : The Next Wave of Integrated Digital Delivery

www.buildtechasia.com

Saflex

Get a reputation for **clear vision.**

Enhanced glass with Saflex® high performance interlayers for demanding applications

As an architect, your reputation is everything. A strong portfolio with successful projects free of product failures is what attracts new clients. So how do you enhance the glass performance and avoid a damaged reputation when working with laminated glass?

The answer is simple: Eastman. At the forefront of PVB interlayer technology since 1937, architects know that specifying Saflex® PVB interlayers in their projects results in high visibility and quality laminated glass.*

Saflex PVB interlayers stand for amazing clarity while increasing the safety and security of final glazing applications and reducing the overall weight, ambient noise, and impact from the sun. With Saflex, you can count on extensive industry expertise, unmatched support during your project design phase, and the reassurance of our ISO 9001 certification.

Want to learn more? Contact us to set up an in-house laminated glass workshop to speak with one of our lamination experts.
saflex.com/quality-laminated-glass

**When laminated under correct conditions*

EASTMAN

AR EZUMI HARZANI ISMAIL

Apart from being the current president of the Malaysian Institute of Architects (PAM), Ezumi Harzani Ismail is the director of Arkitek MAA Sdn Bhd in Kuala Lumpur. Throughout his career with Arkitek MAA, he has completed several hospitals, hotels and government office buildings, and is currently working on high-rise residential and mass rail transit (MRT) projects.

Pusrawi Hospital

Images courtesy of Arkitek MAA

As an institute, our main objective of promoting architecture never wavers, but our approach in attaining these goals have changed.

Ezumi is also a board member of the Board of Architects Malaysia and has been appointed as the advisory board member of Kuala Lumpur City Hall. He is also involved in various government working groups and committees, including PEMUDAH's Focus Group on Dealing with Construction Permits (FGDCP). He graduated with a Bachelor of Architecture from Universiti Sains Malaysia and Master of Philosophy (Policy Studies) from Universiti Teknologi Malaysia.

In this interview with *Construction+*, he shares more about his experiences and his plans at the helm of PAM.

Your father was an art teacher. Can you share a bit about how that has inspired you and your journey in architecture?
That's right, my late father was an art teacher. I suppose I inherited his artistic genes in the sense that I enjoy art, both in creating and appreciating it.

I was a *kampung* boy, and in those days, many things were handcrafted, unlike today where anything can be easily bought. It was not surprising that my friends and I sometimes created our own crafts, such as *wau* (traditional kite), *gasing* (top), *congkak*, *kertuk* (traditional drum made from coconut shell and nibong plank), bird cage, 'lastik (slingshot) and many others. We learnt this by watching our elders, who seemed to be always crafting something in their spare time, whether wood carvings, kites or *wayang kulit* (shadow puppets). It was always nice to have someone artistic in your group of friends to decorate or embellish the creations to make it look better.

Since I was young, I have valued creativity. My great grandfather used to build houses, so I see architecture as an extension of that value creation.

What was one of your most memorable projects? Your most challenging?
My most memorable project is the Pusrawi Hospital on Jalan Tun Razak. It was the project I was working on when I was retrenched in 1998. Lo and behold, it was still there for me when I re-joined Arkitek MAA about a year later. It was a coincidence that during the time I was away from the office, the project was also put on hold.

Ezumi (left) and past PAM president Saifuddin Ahmad accompanying the Sultan of Selangor through an exhibition on PAM's 100-year journey after the official opening ceremony of the new PAM Centre

With such technologies and borderless information exchange, we have to change our mindset to look into different ways of doing business.

The most challenging one was the Ministry of Transport office in Putrajaya. Due to the often-changing client requirements, we had to change our design 18 times! Luckily, we were compensated for that.

What would you say are the main strengths of Arkitek MAA? In what ways have you contributed towards this?

Project delivery is definitely our strength. I say this based on how we secure most of our projects, which is through returning clients and referrals. We have more than 200 staff ready to deliver design works, master planning, detailings and project management services to meet our clients' expectations. We do not spend much time in doing marketing but focus more on ensuring our clients receive the best service we can offer. I always say to our clients that our fee may not be cheap, but they can be assured of good project delivery.

As the director of Arkitek MAA, my duty is to bring in projects to the company and to coordinate and lead the project team in construction implementation. Of course, I also have another 12 partners and three associates to coordinate and look after projects according to their specialisation. For the past 20 years, I have been focusing on hospital, residential and office projects.

PAM was founded in 1920. How has its role evolved through the years, and how does it remain relevant for today?

As an institute, our main objective of promoting architecture never wavers, but our approach in attaining these goals have changed. PAM is like an old wise man, collecting wisdom along its way. We keep improving our organisation to stay relevant. For example, we have been using an e-voting system, instead of paper voting, for our council election since a few years ago.

In professional practice, we engage with government agencies and other construction industry stakeholders to be more efficient in development processes. We offer building information modelling (BIM) training at competitive rates for our members so that they stay updated as well.

We also improve our activities to benefit our members and society at large. We used to focus only on improving knowledge and promoting

good practices, but today, PAM has expanded its contribution not just to its members but also to programmes that involve public participation, such as public art and architecture exhibitions, student exhibitions, student scholarship programme, building and fire safety seminars, public design lecture series, design competitions, sustainable urban development programmes and many more.

This year, we are going to have our Kuala Lumpur Architecture Festival (KLAF) from 28 June to 26 August 2018. During KLAF2018, there will be many events that will involve the public, including a charity chair design competition, which is now open for registration, sustainable Green design forum, public design lectures, public art and design exhibitions and more.

What do you think is the biggest challenge facing the architecture profession today, and what can or should be done?

Technology that can design and build buildings without an architect is definitely something to watch out for. Today, we have 3D-printed buildings that were built almost overnight, and some were also built according to building codes. Since the first 3D-printed building was built in China three years ago, there have been many more across the world, for example in Dubai and Europe. Luckily, they are limited in size and complexity, with the largest about 1,100 square meters in Suzhou, China.

Architects today should be innovative in their project delivery, perhaps even looking into the new technologies that are available out there. The conventional method of construction will be replaced by faster, cleaner and more sustainable methods.

Right now, we are getting our architects to embrace using BIM for their projects. It tremendously improves project efficiency, especially for complex projects, where problems can be foreseen even before construction. It will not be long before a 3D-printed building appears on our shores, but in the meantime, BIM is the immediate solution for efficient large-scale and complex project delivery.

With such technologies and borderless information exchange, we have to change our mindset to look into different ways of doing business. Today, some designers offer their design services from different parts of the world, with design and plans being transmitted virtually via the Internet. Design services are being transacted like a commodity in some places. My advice to PAM members is to equip ourselves with the new technology knowledge and be prepared for such challenges.

Over the past one year as PAM President, what would you consider your biggest accomplishment to date? What do you plan to achieve in the next year?

I am especially proud of the fact that our KLAF in July 2017 was the best one, thus far, in terms of earnings. The two-month festival programme also recorded the highest participation from members of the public through its public exhibition programmes at Solaris Publika, Gallery Petronas KLCC and RUANG by ThinkCity.

Of course, 2017 is also the year when the PAM Centre—our own building in Jalan Tandok, Bangsar—was officiated by the Sultan of Selangor, Sultan Sultan Sharafuddin Idris Shah, on 18 July.

On 2 April 2018, we launched "The Merdeka Interviews" book, which showcases the works done by 17 architects, engineers and artists in our post-Merdeka era. The 668-page tome also reveals an inside story lesser known to the public, about the Kongsi Women who literally helped to build Malaysia's iconic buildings. It compiles important interviews that will serve as historical records of the development of early Malaysia in the 1960s.

The book launch at Loke Mansion, a location befitting the occasion. Apart from being gazetted as a National Heritage Building, Loke Mansion—which was built in 1907 by tin-mining magnate Loke Chow Kit—used to be the 'home' of PAM from 1973 until it moved out in 2012.

This year, we are planning a bigger and better KLAF. We will introduce the International Architecture Education Conference, which will be held back-to-back with our DATUM:KL conference, DATUM:Green and DATUM+ conferences from 4 to 7 July 2018.

Ministry of Transport office, Putrajaya

PRIMA™
FIBRE CEMENT BUILDING SOLUTIONS

GOOD STUFF.

Good design is practical. PRIMA Fibre Cement systems are lightweight yet durable, fast and easy to put up, and cost effective. Save up to 60% on your workmanship. We have a wide range of fibre cement products for any design, and every application from the interior to the exterior of your home including **Ceilings, Façades & Cladding, Wall & Internal Linings, Eaves & Soffits, Flooring & Decking**. Save time, save money by choosing the right material from the start.

Turn to the next page for the full list of products.

For more information, visit us at *primafibrecement.com*

Hume Cemboard Industries
A Member of the Hong Leong Group

Malaysia Sales

No. 12 Jalan Tandang,
46050 Petaling Jaya,
Selangor, Malaysia.

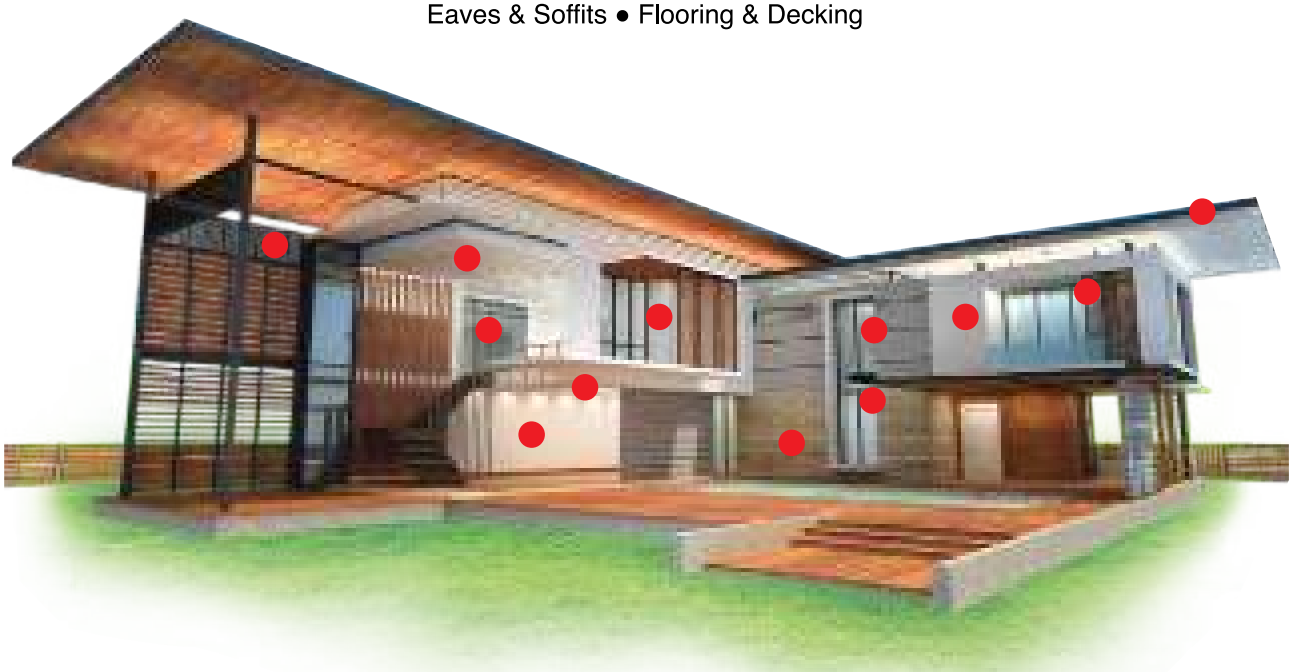
Tel : +603 7625 9999
Fax : +603 7625 7822
Email : sales@humecemboard.com.my

Find us on Facebook:
PrimaHCI

PRIMA™
FIBRE CEMENT BUILDING SOLUTIONS

GET THE GOOD STUFF FOR YOUR DESIGN

Ceilings • Façades & Cladding • Wall & Internal Linings •
Eaves & Soffits • Flooring & Decking



- PRIMA *CTU*™ _Ceramic Tile Underlay
- PRIMA *aqua*™ _Ceiling and Wall Linings
- PRIMA *solidwall*
- PRIMA *lux*™ _Ceiling and Internal Linings
- PRIMA *base*™ _Bracings and Texture Coatings
- PRIMA *drywall*
- PRIMA *liner*™ _Smooth Lining for Walls and Ceilings
- PRIMA *flex*™ _Smooth and Flat Sheet
- PRIMA *plank*™ _The Ideal Wood Substitute
- PRIMA *lattice*™ _Decorative Flat Sheet Screening
- PRIMA *vent*™ _Slotted Eaves Lining

- PRIMA *ceiling* - Seamless

Termite Resistant | Fire Resistant | Water Resistant | Weather Resistant | Environmentally Friendly | Superior Paint Adhesion | High Workability | Aesthetically Pleasing | 50 Years Durability

For more information, visit us at *primafibrecement.com*

Hume Cemboard Industries
A Member of the Hong Leong Group

Malaysia Sales

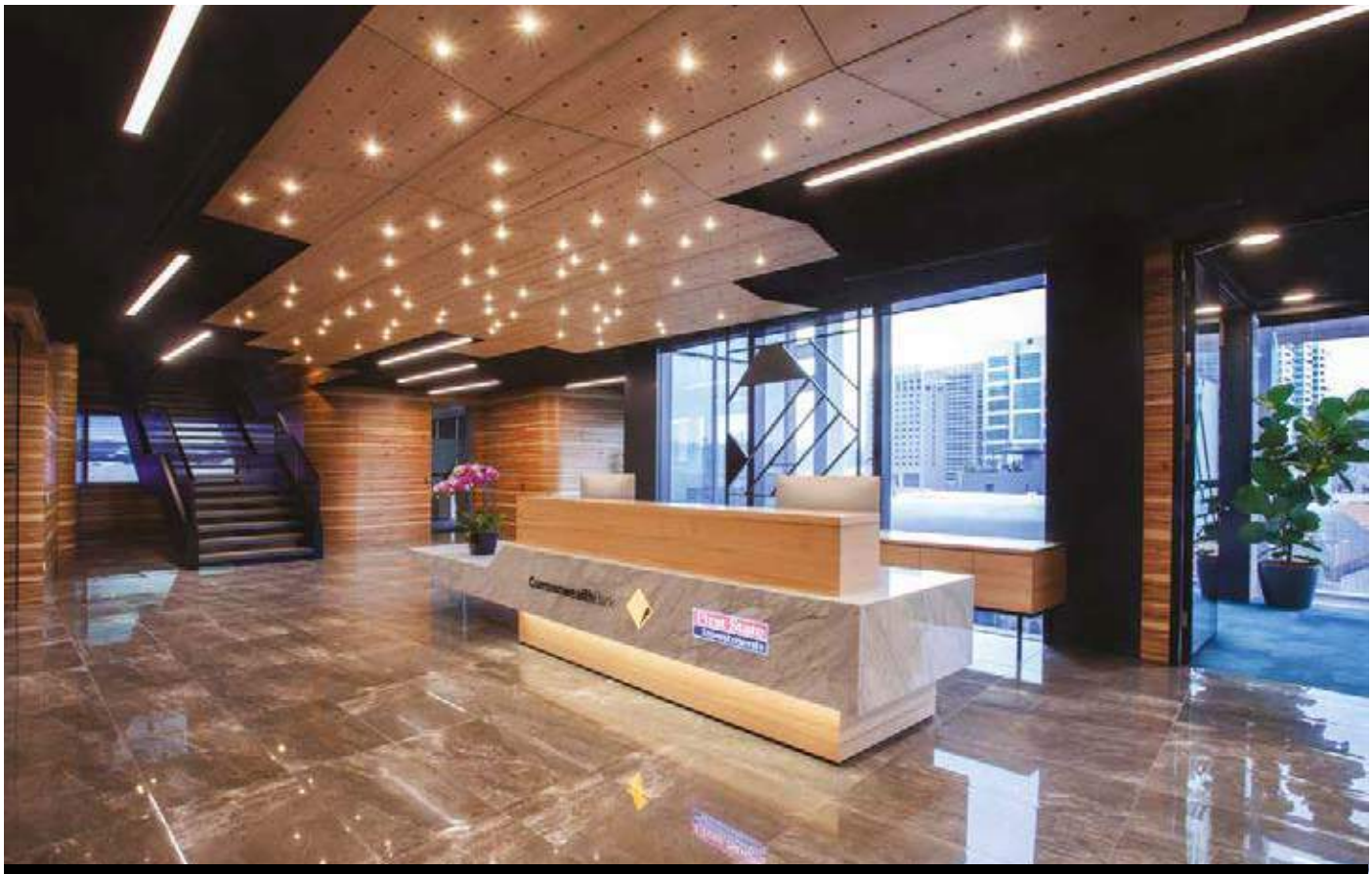
No. 12 Jalan Tandang,
46050 Petaling Jaya,
Selangor, Malaysia.

Tel : +603 7625 9999
Fax : +603 7625 7822
Email : sales@humecemboard.com.my

Find us on Facebook:
PrimaHCI

DEREK MACKENZIE

Derek MacKenzie is managing director of designphase dba. With over 35 years of experience working in the region, he brings a tenacious, pragmatic and client-centric mindset to design issues.



Commonwealth Bank Of Australia

The design profession provides almost daily challenges where divergent improbabilities necessitate thinking outside the box to resolve and integrate issues.

As a seasoned Asian campaigner and designer for both public and private sectors in Singapore and Southeast Asia, MacKenzie relishes using his tremendous wealth of experience in his role as managing director of a multi-award winning interior design company. With over 35 years in Singapore and the region, he brings a tenacious, pragmatic and client-centric mindset to design issues. MacKenzie is a staunch advocate of the immense contribution that open-minded, imaginative designs bring to all businesses. To that end, he has assembled a like-minded team of thoughtful, highly original, creative thinkers and producers to critically assess and implement solutions in partnership with clients. A tireless campaigner for professionalism, MacKenzie remains thoroughly engaged in his field and continues to believe that both people and businesses perform better in well-designed, carefully curated environments.

Tell us about your design philosophy and how would you describe your signature style in managing clients' expectations?
Interior design is all about crafting spatial potential. But success in this endeavour is never one person's enterprise or opinion. The crafting requires orientation, an aspiration towards a preferred future. And the 'enterprise' necessitates collaboration. In our profession, there are often many stakeholders; they all have opinions that vary and compete for attention. Central to this environment, however, are the objectives, expectations and dreams of the client. Empathy with the client and their team will weigh heavily on the opinions and desires of others involved. So, designphase dba builds storylines or narratives that capture, weave in and reframe the client's proposition, gently bring them on board through a process of mutual understanding.

Could you give an example of a recent successful interior project that you have led from inception to completion?
The Commonwealth Bank of Australia (CBA) assignment: the bank's business profile in Singapore was blended with a design aesthetic that emphasised its Australian heritage. This was stylistically contemporised and infused with CBA's brand identity.

Spatially, the needs to accommodate the various business groups, technologies and conference facilities coalesced around the staircase connection that was introduced to link client-facing areas, encouraging the physical ebb and flow between the different spaces. This planning strategy

Food Garden at Asia Square

Clients appreciate the attention we give, not just to the softer creative elements of the service, but also to their concerns about deadlines, budgets and long-term maintenance.

anchored the plan together with the placement of the bank's partner First State Investments, and the positioning of the trading room and made space-planning priorities easier for the flow between operating teams.

The abstracted Federation styling through these public areas helps to visually unify the bank's two main entities (CBA and First State Investments), providing a distinctive Australian look and feel that identify strongly with the bank's cultural background.

What do you think is a major strength of designphase dba and how have you personally contributed towards its success?
The firm operates in three core worlds—corporate, retail and hospitality. And in every project our goal is to create positive experiences through their designs, delighting staff, customers and guests respectively.

It is our belief that the development of a strong visual narrative provides a solid foundation on which to build or craft a concept for clients in each of these sectors. The depth of research we draw from and apply pays off from our clients being satisfied and their proud association with the outcome. But the development of a successful concept is only part of the story for professional interior (or other) designers.

From the firm's earliest days, we have felt it essential to deliver projects through a structured framework. Our robust process keys into every definition of design thinking and extends this methodology to the bidding, implementation and completion stages. The need for the designer's involvement throughout the project life cycle ensures that key messages within the design are handled with care and that the design philosophy is not lost through the commercial cut and thrust of practical execution, and that there is strong commitment to quality in every decision.

Could you give an example of a creative and practical interior concept that you have conceived and delivered?
At the outset, Philips made it clear that their new 380,000-square feet APAC Centre would need to conform to a number of important criteria:

a) While this is a headquarters building, the administrative aspects need to fuse with the design, R&D, prototyping, workshops and warehousing of Philips' product creation. This encourages a culture of understanding and co-creation between the various parts of the organisation

b) As a 'BI' class (light industrial) building, the proportion of occupancy by the headquarters and industrial functions is strictly governed.

Understanding how Philips sees these two aspects individually necessitated a visit to Amsterdam (headquarters) and Eindhoven (High Tech Campus) where the differences were observed as 'stark'.

c) The task in Singapore was to bring these two together as an agile working environment, within one building.

The goal was to create an ecosystem where Philips employees, stakeholders, associates and partners would see one another, greet customers, collaborate and create together as a mutually beneficial community within an open and supportive workplace.

What is the foremost interior design principle(s) or consideration(s) at the onset of your engagement and discussion with clients?
Clients appreciate the attention we give, not just to the softer (perhaps more exciting) creative elements of the service, but also to their concerns about deadlines, budgets and long-term maintenance.

The development of an empathetic relationship with a client will open gateways to understanding their operations, idiosyncrasies, values and brand personalities. But this will also help to shed light on the practicalities related to a client's internal politics and their concerns related to stakeholder demands, reporting necessities and the impact the work will have on current businesses, staff and public relations/perceptions.

Another key consideration from most clients is the 'yield' from space planning. Corporate clients are concerned about headcount; F&B operators about seating capacity; hoteliers about revenue area and room count; and retailers about product and brand displays, stock keeping units and promotion areas. Here, ambition and reality can come together; so early address, debate and decision-making are essential to the time it will take through to concept evolution.

In recent years, recognising the interconnectedness of buildings, people and community in the creation of an environmentally responsible built environment, interior design practice has incorporated strategies that now focus on providing physiologically and psychologically healthy indoor environments for individuals to live, work and play. Could you share how a recent project has successfully done so, minimising negative and maximising positive impacts over the expected life cycle?
When designphase dba was approached by the developer of Asia Square to propose a concept for a food court on the second storey, our initial thoughts were as follows:

a) With the business-like severity of the development's architecture, it was clear to us that those working in the precinct would need physical and psychological relief from their pressured work life.

b) If you think about a food court, generally everyone will have in mind how it should be and how to go about its operations. So we proposed a 'multi-cuisine dining destination', reframing the proposition to allow a creative dialogue to open up in a very unusual direction.

Currently, with Asia Square being part of the 'City in a Garden', we pushed forward the idea of a 'Garden Within a City in a Garden'. With free flowing curves and generous spatial arrangements similar to a park in the CBD, this concept provided the added advantages of exposing vendor brands to the majority of diners and easing traffic through the 70,000-square feet space with nearly 1,300 seats. An abundance of greenery calms the nerves and is easy on the eye. Interestingly, the leaves and stems of all the plants, which were specified as artificial, contributed positively to the sustainability target of LEED Platinum due to the energy saved from unnecessary plumbing and special lighting. Huge potential costs were also saved in ongoing maintenance and attention to hygiene.

Interior designers aim to create internal spaces that are both visually appealing and practical. Could you highlight a notable work in which you successfully overcame a challenging proposition that competently integrated seemingly divergent improbabilities?
The design profession provides almost daily challenges where divergent improbabilities necessitate thinking outside the box to resolve and integrate issues, which seem superficially impossible, or at least very difficult.

Hindustan Unilever's New Corporate Headquarters building in Mumbai had been planned to be in six separate buildings, accommodating their various operating components. These were linked to a ground floor 'street' that was essentially a five-storey-high atrium space where F&B, retail and services functions were located. While a couple of bridges were planned, these were perfunctory in their location and utilitarian in concept. Our dilemma was: "How do you connect all of the 2,000 employees within the buildings, so that they can integrate, collaborate and just get to know one another more easily?"

The key that unlocked this dilemma came in three separate but allied notions:

a) Working closely with DEGW (strategic planners) it was suggested that there should be more bridges and open stairs. And they should not be prioritised over the other in planning their locations. If the bridges crossed the atrium at usual angles, they would offer employees the opportunity to see their colleagues as they moved around the building.

b) Locate what would have been internal (within the office space) meeting rooms to positions outside of the office area facing the atrium and create 'terraces' there (inside the atrium) as landing points for the bridges. This meant that employees would converge at these points for meetings, chats and connections. Of course, this also considerably heightened the likelihood of serendipitous connectivity and opportunities for informal conversations.

c) By externalising these terraces towards the atrium, they and the pathways that connect them to their internalised offices would also be exposed to the view of all who are in the atrium, ground or upper levels. An ideal opportunity was therefore created to 'brand' these balconies with themes that represented the Unilever departments that they were associated with.

Another great example was Napoleon Restaurant in Telok Ayer. The client had a limited amount of space (1,100 square feet) and a requirement for a

Napoleon Restaurant

Developing an empathetic relationship with your client will open the floodgates of understanding operations, concerns and aspirations.

full service kitchen, a separate bar and an Enomatic wine dispensary, as well as 50 seats for diners! Here, we created a 'hidden gem' concept, where the exterior was treated modestly but the interior really popped once you pass through the entrance.

What are the major challenges faced by the studio and the interior industry in Singapore in general?
There is still confusion in some client's perceptions as to what interior designers are supposed to do and how they work (where processes are concerned). This is not helped by a lack of clarity in certain segments of the industry itself. But there is general recognition from industry representatives like the Interior Design Confederation and the Society of Interior Designers that more public awareness is necessary, which will be helpful for both the professional community and the public. The most prevalent question is: "What is a design consultant and how is this different from a design builder?"

Undertaking challenging assignments is stressful in any studio. For design consultants, this can be made even more difficult with this sort of confusion or misunderstanding and will be exacerbated if fees are supressed, budgets are limited, deadlines are shortened, or changes keep recurring to the design. At the end of the day, to keep things moving, those involved in such projects need to believe that they are working toward a common, shared purpose and that the outcome will be a reflection of their creative spirit, positive professionalism and never-say-die attitude. And they need to know we as directors and leaders are always there to support them.

What are the main objectives that you try to meet in every design?
Innovation, operational efficiency and punctuality. Developing an empathetic relationship with your client will open the floodgates of understanding operations, concerns and aspirations. Reframing the brief to allow your imagination to develop something distinctive. Managing everyone's ambitions to control the outcome within the established time and money targets.

What principles are fundamental to your work ethos and culture?
Creating positive experiences through design is central to the designphase

Living up to your promises creatively and professionally enhances your reputation. This is the most important reward to be gained from every project.

dba spirit. We celebrate our positive and inclusive culture, and it permeates every part of our business. When recruiting, we look for "what makes someone different"; "what can we learn from this person"; "what experiences indicate that this candidate has creative initiative, courage to voice their views and a desire to jump the fence and see things from a different perspective". This is because these qualities are likely to predispose them to explore and to appreciate client issues as a fundamental aspect to any brief. It is not just our people who buy into our company culture, but our clients do so too.

What are some of the major accolades that you have won and how have they motivated you?

Our firm has won many industry awards, more than most. And over 35 years, we have remained remarkably consistent in this regard. But by far the most important accolades to us are those from appreciative clients.

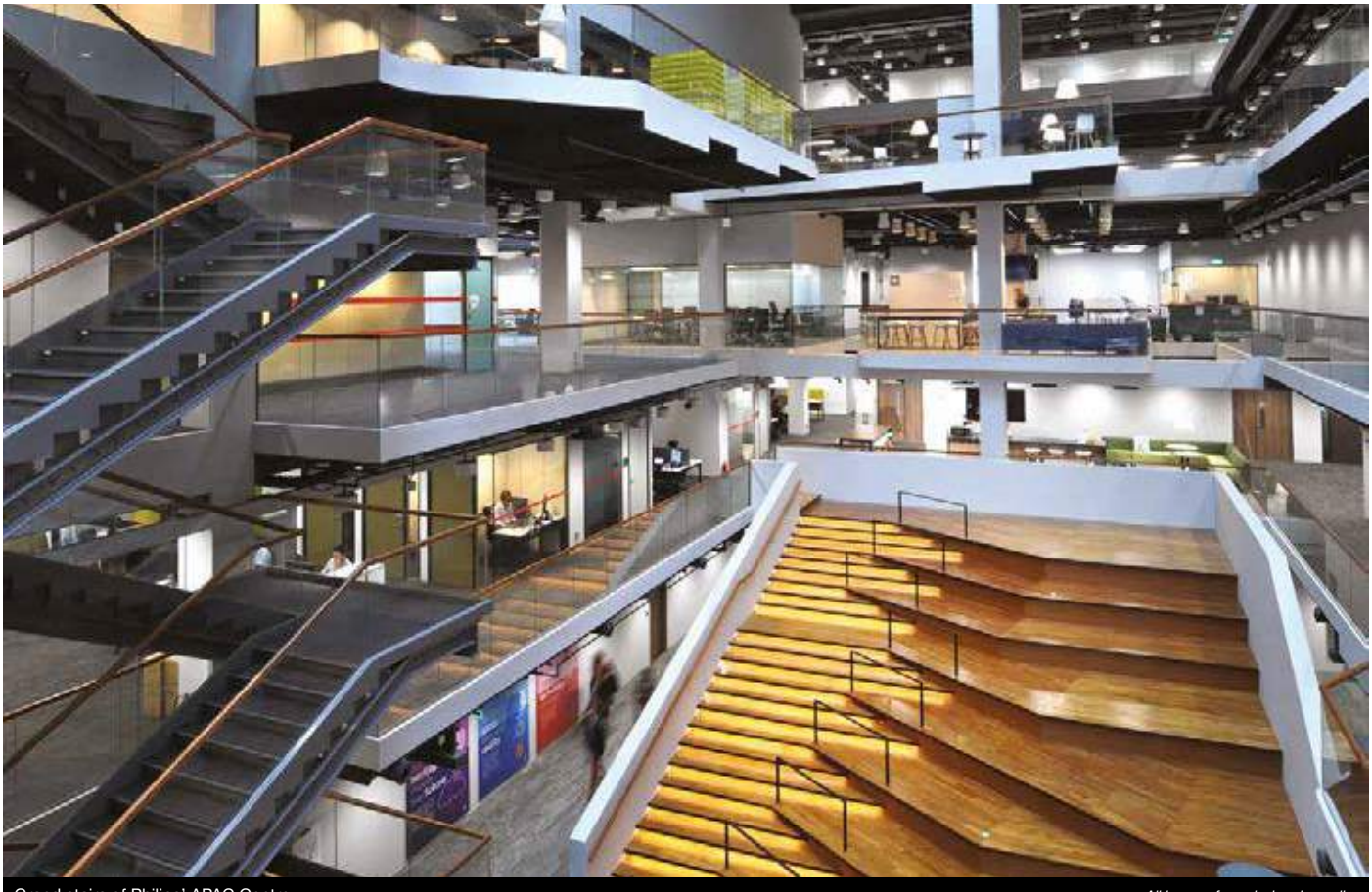
How do you want your legacy to be remembered when it comes to your design?

With integrity, tenacity and diversity.

Being original is much harder than copying and pasting. Being original in multiple sectors is more exciting, experiential and educational than specialising in one. We are delighted when a potential client selects our concept because it resonates in a positive way with their aspirations. We think this is partly because we have a broader outlook, which is influenced by working in other sectors. Living up to your promises creatively and professionally enhances your reputation. This is the most important reward to be gained from every project. It is much more valuable than revenue, as it will bring clients back.

What are your upcoming plans for 2018 and 2019?

We will be creating positive experiences through design by providing the design community with an interesting voice. We are planning to continue our collaboration with relevant partners of the design field for events, e.g., designphase dba's Community Learning Series. Initiatives such as these help us to connect with professional specialists and to provide the wider community with a different perspective on interior design. We will be following up on our two successful events Scent in Spaces and Sound in Spaces with new and interesting ways of appreciating the world in which we work, live and enjoy.



Grand stairs of Philips' APAC Centre

All images from designphase dba

ZWCAD

Free download at www.zwsoft.com

Email: sales@zwcad.com

Cost-effective CAD for Architectural Designers

- Seamless compatibility with DWG 2018
- Save budget with perpetual license
- Customizable UI and toolbar
- Maintenance Plan & Friendly upgrade policy
- 550,000+ users worldwide

Free download at www.zwsoft.com | Email: sales@zwcad.com | Powered by ZWCAD Software Co.,Ltd.

Authorized partner across: Malaysia, Singapore, Indonesia, Philippines, Vietnam, Thailand and India.

BCI ASIA AWARDS 2018 SINGAPORE

BCI ASIA AWARDS 2018 RECOGNISES THE BEST IN SINGAPORE'S ARCHITECTURE, DESIGN AND PROPERTY DEVELOPMENT

On 4 May 2018, BCI Asia hosted the Singapore leg of its BCI Asia Awards 2018, an annual gala affair, now in its 14th year, held in seven countries in the region. The event honours the best in the industry: top-earning architecture firms and developers constructing the greatest volume of buildings in Asia (BCI Asia Top Ten); excellent Green designs from the architecture fraternity (FuturArc Prize); and ingenious environmentally sensitive projects (FuturArc Green Leadership Award). Additionally, some of the most distinctive interior designs in Singapore (BCI Interior Design Awards) were also recognised.

This year, the awards was especially meaningful as BCI Asia celebrates its 20th anniversary. Chairman of BCI Asia Dr Matthias Krups shared nuggets about the company's beginnings way back when, and how it has transformed itself into a dynamic and multifaceted enterprise. The company is now a major stakeholder in the region's construction sector.

Collaboration is key. And Catherine Loke, first vice president of the Singapore Institute of Architects, who was the guest of honour of the evening, echoed this ethos. She lauded BCI Asia's efforts, as a private sector entity, in bringing industry players together by sharing information, creating networks, and showcasing the best projects in the country and the region, to encourage excellence and forge alliances.

The Singapore event drew more than 240 distinguished guests.

BCI Asia Awards partners appreciated the opportunity to connect with some of the industry's most important people.

"Great event ... and thank you for all your support. You know that we always want to improve and make things bigger/better, so we appreciate us working so closely together," commended Benedikt Herweg, managing director of Schüco South East Asia.

"The event was great, and we appreciate the exposure for Technal and the opportunity to meet with key people. We will definitely consider this event for next year," remarked Xavier Courboin, managing director, SEA–Pacific, and marketing director, Asia, Technal Southeast Asia.

"Through your efforts and those of other individuals and corporations in the community, we were able to generate some enquiries and business leads. It's been a long time since I have been to a sit-down dinner that was that much fun," said Danny Ng, strategic business manager of Hafele Singapore Pte Ltd.

"We witnessed the success of this event and find it very useful for young companies like us, as we could showcase our products to major developers/architects of this region. We will not hesitate to recommend any of our business associates to take part in this event in the future," said Johnny Chua, director of Innivate Pte Ltd.

The BCI Asia Top Ten Awards were presented by Xavier Courboin, managing director, SEA–Pacific, and marketing director, Asia of Technal Southeast Asia, and Dr Matthias Krups, chairman of BCI Asia.

BCI ASIA TOP 10 ARCHITECTS – SINGAPORE 2018

June Lee Chian Huay, senior principal architect

Ooi Wen Chuen, senior associate

Sim Choon Gek, director

Lee Wai Fong, director

Abdul Jalil, executive director

Steven Low, senior director

Lee Wah Fong, associate director

Lau Shuh Ling, director

Tjen Hian Ka, senior director

Michael Vong, senior director, Architecture

BCI ASIA TOP 10 DEVELOPERS – SINGAPORE 2018

Li Yang, manager, Business Development and Investment

Alfred Ng, senior manager, Projects

Du Ti Ping, deputy director, China Construction (South Pacific) Development Co Pte Ltd

Bai Baoyu, general manager

Dora Chng, general manager, Property Sales & Marketing

Koon Wai Leong, general manager

Yen Chong, deputy general manager

Teo Hong Lim, CEO

Darren Lim, marketing manager

Chong Teik Yean, senior vice president, Projects (Head)

FUTURARC PRIZE 2018

From left: FuturArc Prize 2018 Professional Category 3rd Place winning team receiving the prize from Arnold De Silva, head of Construction Chemicals – ASEAN, BASF South East Asia Pte Ltd and Candice Lim, FuturArc managing editor

FUTURARC GREEN LEADERSHIP AWARD 2018

From left: Benedikt Herweg, managing director of Schüco South East Asia presenting the FuturArc Green Leadership Award to Morphogenesis for their winning projects in the Institutional category, with Robert Krups, CEO, BCI Asia

BCI ASIA INTERIOR DESIGN AWARDS 2018 SINGAPORE WINNERS

The Interior Design Awards were presented by Max Missbichler, senior sales manager, TROX Malaysia Sdn Bhd, and Nish PKN, BCI Asia's general manager (Emerging Markets).

THE CRATE APARTMENT (Residential category, UPSTAIRS_)

HOUSE IN A FLAT (Residential category, NITTON Architects)

COO SOCIATEL HOSTEL (Hospitality category, Ministry of Design Pte Ltd)

FLAME CAFÉ AND SPARK RESTAURANT (F&B category, Paper Plane Architects)

LEE KONG CHIAN SCHOOL OF MEDICINE (Schools category, DP Design)

NUS UNIVERSITY SPORTS CENTRE (Schools category, Forum Architects Pte Ltd)

NOVOTEL SINGAPORE ON STEVENS (Hospitality category, DP Design)

ID ARCHITECTS DESIGN STUDIO (Workplace category, ID Architects Pte Ltd)

RACE ROBOTICS LABORATORY (Workplace category, Ministry of Design Pte Ltd)

SHANGRI-LA HOTEL SINGAPORE (Hospitality category, Bond Design Studio Inc)

SPONSORS AND EXHIBITORS

BASF South East Asia Pte Ltd

Schueco Singapore Pte Ltd

TROX Malaysia Sdn Bhd

Armstrong Flooring

Technal Southeast Asia

Hafele Singapore Pte Ltd

Daikin Airconditioning (Singapore) Pte Ltd

Dow Corning

Kaldewei South East Asia Pte Ltd

The Floor Gallery Pte Ltd

Inniviate Pte Ltd

www.sheetmetal.com.sg

"It is not doing the thing we like to do, but liking the thing we have to do, that makes life blessed."

Johann Wolfgang von Goethe

ROOFS FACADES IN METAL

SHEET METAL INTERNATIONAL SYSTEMS

SHEET METAL INTERNATIONAL SYSTEMS PTE LTD
30 Marsiling Industrial Estate Road 5
#03-05 Singapore 739211
T (65) 6365 7131 **F** (65) 6365 2086
E sheetmetal@pacific.net.sg

Leading Brand . . .
New Drive!

E·MIX®

A SAINT-GOBAIN BRAND

System Solution Provider:

- PPVC / PBU
- WALL
- FACADE
- ROOFING
- FLOOR
- BASEMENT

E.MIX is a leading brand in premixed plasters and mortars with a presence of over 30 years in the building industry and is extensively used in various prominent projects in Singapore. One of the country's pioneer in construction chemicals and mortar technology, E.MIX has been proudly deemed as the construction market leader that produces excellent and conforming premixed products. All E.MIX plants are fully automated and hence, the processes are systematically monitored and controlled to provide and deliver products of finest quality at all times.

EMIX INDUSTRY (S) PTE LTD – A SAINT-GOBAIN BRAND
2 Venture Drive #09-10 Vision Exchange Singapore 608526
Tel: 6363 5340 Fax: 6363 5988
Email: EIS.INFO@Saint-Gobain.com
Website: www.emixgroup.com

TOPTEN
ARCHITECTS 2018

BCI ASIA AWARDS 2018

WINNERS MALAYSIA

TOPTEN
DEVELOPERS 2018

RDC ARKITEK

RDC has grown from a staff of 13 to more than 70

The Capital City mixed development in Johor Bahru

Six-time BCI Asia Top Ten Architects 2018 winner RDC Arkitek Sdn Bhd traces its roots to Regional Development Consortium Architect, a Singapore practice that was established in 1971.

The firm expanded to Malaysia in 1992, opening branch offices in Kuala Lumpur and Melaka in 2005 and 2012, respectively. Over the past 27 years, RDC has delivered a number of large-scale projects, such as Mutiara Hotel, Hatten City and KSL City. It also recently opened its new headquarters at ECO Business Park, Iskandar Malaysia, in Johor Bahru (read more at page 56).

RDC is currently helmed by directors Tan Choon Kiat, Mohd Hisham Ibrahim and Lee Wee Siang. Tan shares with *Construction+* how the firm has grown, especially since he first joined 14 years ago.

Upon completing his architectural studies at Louisiana State University in the US, Tan worked with the Stephen Jacob's Group in New York City for two years before returning to Malaysia. "The group in the US had a very good system, but the scope of work was limited as I had to learn everything step by step, and it became a bit too slow for me," he says.

In 2004, he joined his uncle Siow Chien Fu, who was then a director at RDC. At that time, there were only three architects who had to be out attending meetings and visiting job sites in the day time, only returning to the office in the evenings to draft minutes and draw out plans. "This resulted in inefficient use of time with a lot of repetitive work and overtime," Tan says.

Through the years, the practice grew with more architects and more layers of oversight. "RDC has evolved a lot, from a staff of 13 to more than 70," Tan adds. "With our structure, work can still go on even if someone is away. We have instilled a task-oriented culture so that everyone is self-motivated to work more efficiently. I'm glad to say that for the past eight years, we have not needed to pay out any overtime."

LESSONS AND GOALS

One of the most impactful projects for Tan was the KSL City shopping mall in Johor Bahru, which was built from 2008 to 2012. Located on 6.7 acres in the middle of the city, surrounded by low-rise buildings, the 2.5-million-square-foot mixed development comprised a shopping mall, hotel and apartments.

"We were involved in this project from beginning to the end," says Tan. It was not an easy period with a recession, small market and high steel prices, but the project was successfully completed on time.

"We learnt a lot from the perseverance of the owner, Mr Ku Hwa Seng, who was also the project's main contractor. We would have site meetings every Monday; before the meetings, from 10am to 3pm, he would walk the site, examining every floor and corner and dealing with the smallest details."

While Johor Bahru remains it core base, RDC is gradually making its name in other parts of Malaysia, spurred by continued work from long-time clients, such as Gadang Holdings, LBS Bina and Green Target Group. The company has also moved from designing single projects and parcels to master planning developments, such as the ECO Business Park I and II.

"We started initiating master plan proposals as an edge to get a bigger piece of the pie," says Tan. "Looking ahead, we want to move into more niche markets and projects, such as airports, museums or hospitals."

REFLECTIONS

As the 'third generation' of directors to carry the torch for RDC, honesty and integrity are two key elements for a successful partnership.

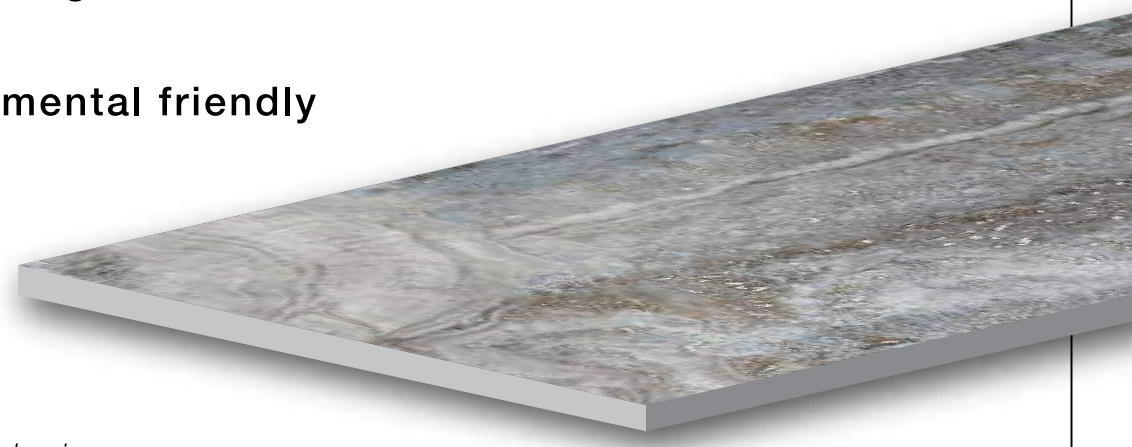
"Our motto is 'whatever we do, we do it for the company'," says Tan. "If our focus is for the company, nobody can question you or get offended because we do not have any hidden agenda. If there are any issues, we speak out. That's what we have kept on insisting from the beginning."

Brought to you by RDC Arkitek Sdn Bhd

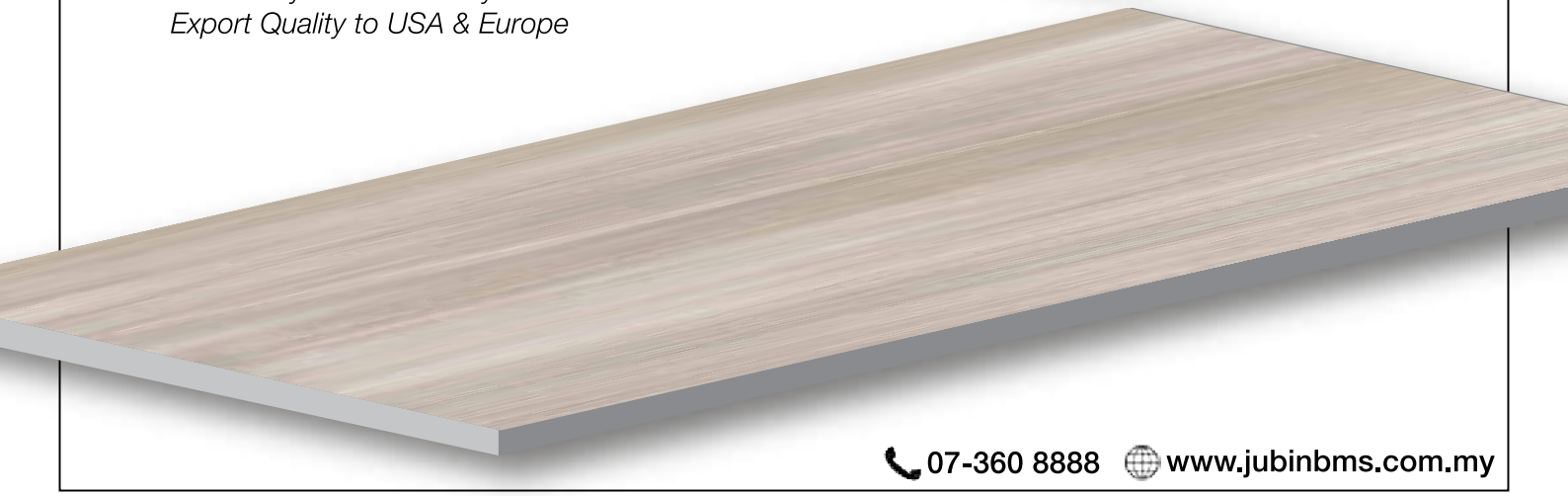
7mm eco porcelain

BMS PORCELAIN
SURFACE EXCELLENCY

- Great performance for wall covering
- Reduce building weight
- Easier handling & installation
- Increase productivity & project efficiency
- Greener logistic, reduce CO2 emissions
- Environmental friendly

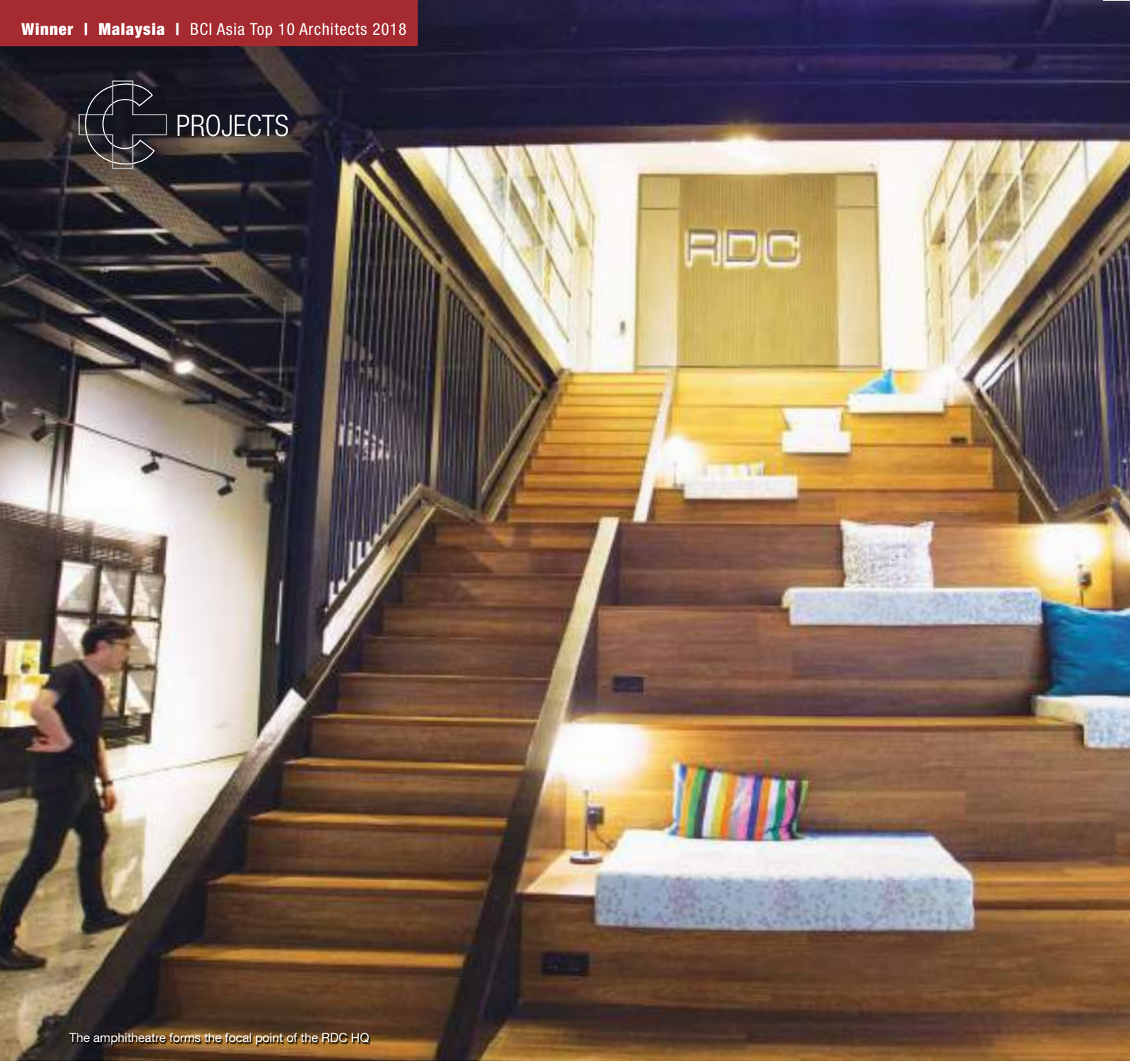


Proudly Made in Malaysia
Export Quality to USA & Europe



07-360 8888 www.jubinbms.com.my

PROJECTS



The amphitheatre forms the focal point of the RDC HQ

RDC HQ

The library for public and staff

The open and ergonomic co-working space

When architects get to design their own office, the possibilities are endless.

"RDC HQ acts as a large design playground for our designers to realise our dream workplace fantasy," says director Tan Choon Kiat.

The plan was to maximise the half-acre site at Eco Business Park 1 in Iskandar Malaysia and to craft spaces for a variety of uses.

As a result, the new RDC headquarters is a synergistic mixture of an open and ergonomic co-working office and a social and informative space, designed to promote work-life balance and bonding among colleagues.

The ground floor space acts as an informative centre with exhibition space and library for industry professionals, construction-related personnel and visitors to learn, play and mingle together. To ensure easy and welcoming access into this public area, a 'fenceless' design is adopted.

An amphitheatre, with its cosy tiered seating, is the focal point of the project. It serves as the main gathering space and a platform for regular

Hand-sketched artwork on the dining hall walls

One of the booths at the exhibition space

public events or talks by building material manufacturers or professional association bodies to share knowledge and educate the public, site personnel, students and developers.

The building's lower façade sports an aluminium composite panel that enhances the translucent glazing on the top, which acts as a filtration component to prevent direct sunlight penetration into the work space.

Due to time and budgetary constraints, careful attention was paid to every material and detail—such as the size and angles of each aluminium panel before manufacturing, and the quantity of tiles—to minimise the material wastage and maximise on-site efficiency.

Lighting—diffuse lighting, uplights and garden lighting—is used strategically to create ambience and to express the building's charm in the dark. The landscape and hardscape are used as vernacular elements to blend in with the greenery in the business park.

PROJECT DATA

Project Name
RDC HQ

Location
1, Jalan Eko Perniagaan 1/7,
Taman Eko Perniagaan, Johor Bahru, Malaysia

Completion Date
18 January 2018

Site Area
2,013.48 square metres

Gross Floor Area
818.75 square metres

Building Height
2 storeys; 10.6 metres

Owner
RDC Arkitek Sdn Bhd

Architecture Firm
RDC Arkitek Sdn Bhd

Principal Architect
Ar Tan Choon Kiat

Images
RDC Arkitek Sdn Bhd

NIPPON PAINT

WE GOT YOU COVERED.

NIPPON PAINT WORKING BEAUTIFULLY, EVERYWHERE.

Nippon Paint (Singapore) Co. Pte Ltd
1, First Lok Yang Road Jurong Singapore 629728
Tel: (65) 6265 5355 | Fax: (65) 6264 1603

www.nipponpaint.com.sg/trade

A minimalistic showcase of timeless aesthetics

PAM CENTRE BANGSAR

Layering effect of break-out spaces

The landmark PAM Centre in Bangsar stands as a showcase of timeless aesthetics and sustainable architecture.

Sited on a narrow tract of land on Jalan Tandok, the original four-storey former warehouse has been transformed into an iconic 10-storey building that a whole institution of architects is proud to call their own.

The Malaysian Institute of Architects (PAM) purchased the property in 2010 with plans to develop it into an architect-driven centre for contemporary arts. However, due to circumstances, the plans were expanded to include a new headquarters in 2012.

PAM invited its corporate members to submit design proposals for the new centre. The chosen design out of 36 entries—by Ar Mohd Heikal Hasan of HMA & Associates—provided an elegant and efficient solution for the highly constrained site.

In May 2016, the PAM Centre was completed at a cost of RM17.8 million. With a built-up of 3,782 square metres, it includes an auditorium, exhibition hall and rooftop skybar.

AN ARCHITECTURE ICON

The minimalist building cuts a distinctive figure with its striking powder-coated black aluminium grid façade wrapped around exposed concrete

Open-air landscaped atrium

walls, accented by yellow staircases on both ends of the building.

Diagonally stacked and landscaped open atriums add splashes of green to an industrial backdrop, while promoting cross ventilation and connecting the whole building together. These pockets of semi-private spaces are inspired by the old Chinese shophouse courtyards.

Running alongside the atriums is a long single-flight steel staircase, which emphasises transparency, connection and flow, both physically and visually.

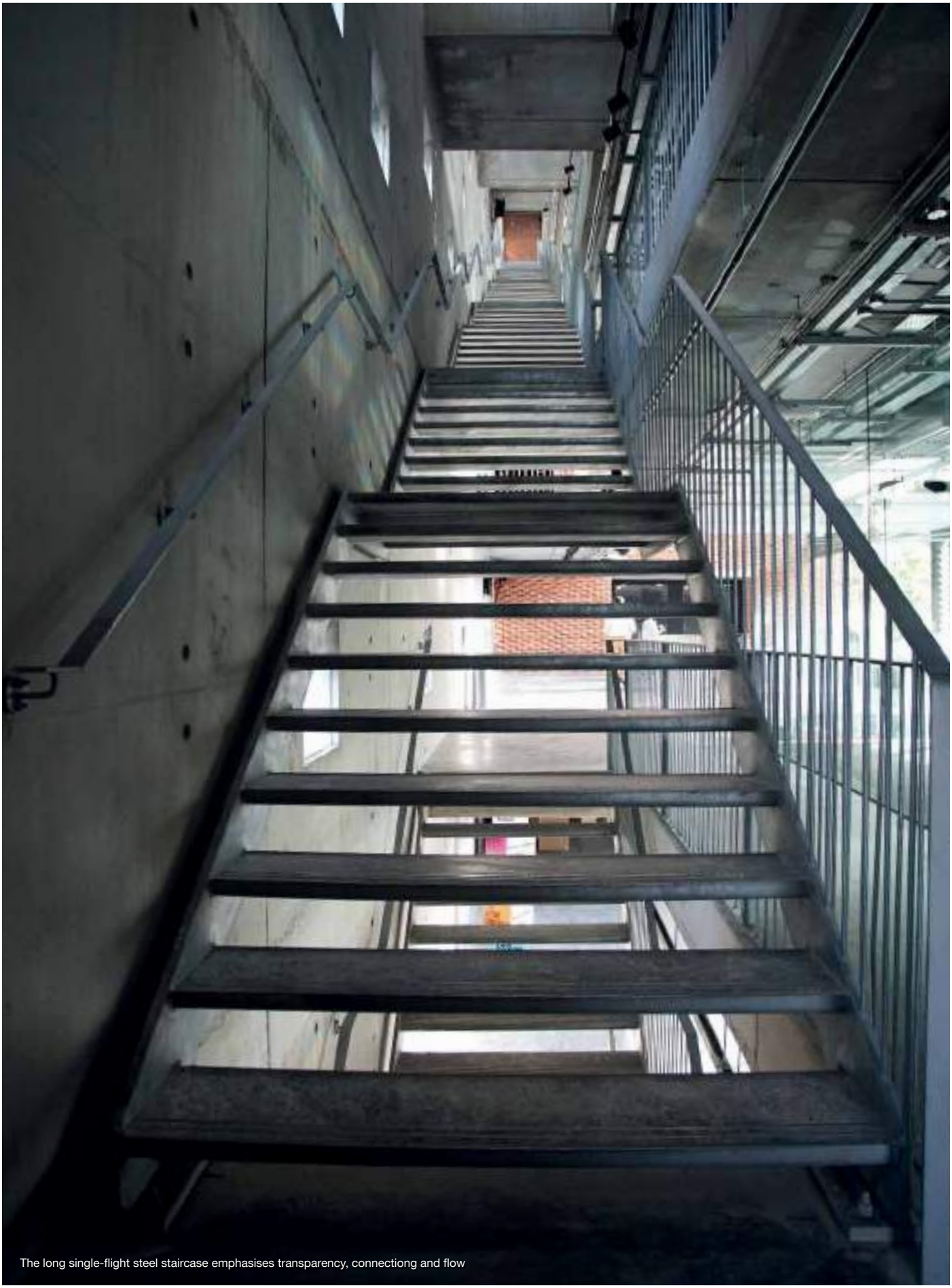
The backdrop of these is a concrete shear wall, which forms the spine of the centre. Made from off-form concrete, the wall shields the centre from neighbouring block, which has a somewhat 'loud' colour scheme.

The raw and unfinished materials used inside and out were chosen for their richness of texture and ageless appeal.

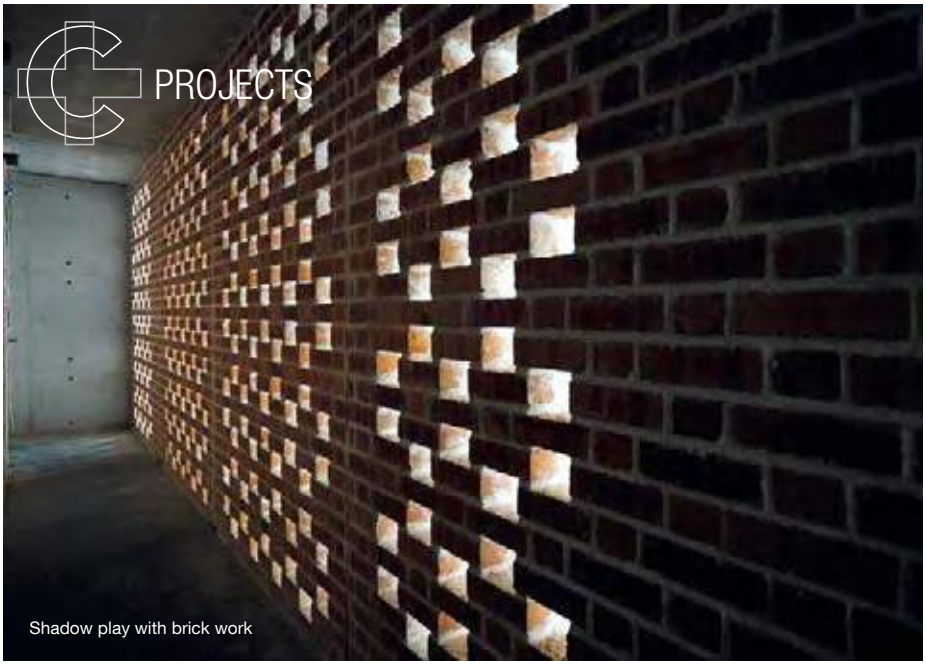
A SUSTAINBAILITY SHOWCASE

The centre received the highest rating of platinum under the national Green Building Index (GBI) for sustainable and efficient buildings with its careful design and systems.

Ample natural light and air flow are key features that are instantly evident as one steps into the triple-height entrance foyer. More than half the space is illuminated with natural light that streams in through large glass openings and skylights. Old-school louvre windows and punched holes in the shear wall facilitate cross ventilation—all public and circulation spaces, such as lift lobbies, escape staircases, toilets and the sub-basement, are naturally ventilated.



The long single-flight steel staircase emphasises transparency, connectiong and flow



Shadow play with brick work

Roof deck

The original four-storey structure has been retained and incorporated into the new building, reducing the use of new building materials. The cafeteria, exhibition spaces, auditorium, storage space, training room, and prayer rooms occupy the original structure.

Egg crate-like sun shading devices and blinds on the north-west façade help cut down 60 per cent of the solar radiation, preventing glare and reducing heat penetration into the office spaces. The cold air trapped during the night in the building's south-east-facing concrete wall is naturally released in the morning, helping to further cool down the building.

The building automation system and solar panels increases energy efficiency, while water-efficient fittings and a rainwater harvesting system result in huge water savings. On-site composting contributes to the building's landscape sustainability, while hybrid vehicle charging stations and bicycle racks outside the building encourage Greener modes of transportation.

Apart from the landscaped atriums, there is a herb garden at the back of the centre, with local herbs such as pandan, limau purut, lemongrass and galangal.

No doubt, the project's Green building features drive PAM's message of sustainability, while also contributing towards cutting edge technology in the building industry.

PROJECT DATA

Project Name
PAM Centre Bangsar

Location
99L, Jalan Tandok, Bangsar, Kuala Lumpur, Malaysia

Completion Date
May 2016

Site Area
1,120 square metres

Gross Floor Area
3,782 square metres

Building Height
10 storeys

Owner
Malaysian Institute of Architects (PAM)

Architecture Firm
HMA & Associates

Principal Architect
Mohd Heikal Hasan

Interior Design Firm
Spatial Factors Sdn Bhd

Principal Designer
Ar Chris Yap Seng Chee

Civil & Structural Engineer
TY Lin International Sdn Bhd

Mechanical & Electrical Engineer
Primetech Engineers Sdn Bhd

Quantity Surveyor
JUBM Sdn Bhd

Landscape Architect
In-Site Design

Green Building Consultant
Exergy (M) Sdn Bhd

Main Contractor
Al-Ambia Sdn Bhd

Images
PAM; Mohd Radzi Ibrahim

The P2STP is the largest sewage treatment plant in Asia Pacific

PANTAI 2 SEWAGE TREATMENT PLANT

For more than 50 years, Pantai Dalam—one of the oldest settlements in Kuala Lumpur—has been known as the home of the Pantai Sewage Treatment Plant, an open-air oxidation pond that served as one of the most critical sewage treatment facilities in Kuala Lumpur. The unfortunate by-products of this service are the water pollution and unpleasant odour that emanate from the facility.

Under the 10th Malaysia Plan, the RM983 million Pantai 2 Sewage Treatment Plant (P2STP) was built to replace the original facility. This new state-of-the-art mechanised underground regional sewage treatment plant has proved to be a model for innovation in concept, design, engineering and construction—setting new standards for sewage treatment in Malaysia and transforming its surrounding environment.

FROM POND TO PARK

The Pantai catchment area covers 6,700 hectares in the central and south-western parts of Kuala Lumpur—including Bandar Baru Sentul, Sentul Raya, the Bukit Kiara central business district, Taman Botani and parts of Petaling Jaya—with a 320,000-cubic-metre per day capacity to serve a population equivalent to 1.423 million.

The mega sewage treatment plant—the largest in Asia Pacific—is constructed on the same site as the previous oxidation ponds and comprises two main parts: the sludge treatment facility above

The above-ground anaerobic sludge digester

ground and the fully underground multi-layered sewage treatment facility that goes 17 metres deep.

At the ground level, there is also a 12-hectare public park—Pantai Eco Park—complete with waterways and abundant greenery, as well as recreational facilities, such as jogging track, playground, courts for futsal, tennis, sepak takraw, volleyball and badminton, community centre, cafeteria, surau and covered parking.

TREATMENT PROCESS

The plant is designed for Standard A effluent discharge quality as prescribed in the Environmental Quality (Sewage) Regulations 2009.

This state-of-the-art plant uses advanced anaerobic-anoxic-oxic (A2O) liquid treatment process—using microorganisms to break down sewage material—which results in better quality effluents, more efficient and effective removal of contaminants such as nitrogen and phosphorus from wastewater, more stable operating system, minimal production of sludge, and a smaller footprint.

With centralisation of sewage treatment at P2STP, as many as 140 small plants that produce substandard effluent can be closed, reducing pollution into the Klang River. Odour scrubber systems are provided at this plant to treat odorous gases from the sewage and sludge treatment.

GREEN TECHNOLOGY

The P2STP is built with sustainability in mind, capitalising on renewable resources for energy and water to reduce wastage and pollution. It has a Green Building Index (GBI) silver rating.

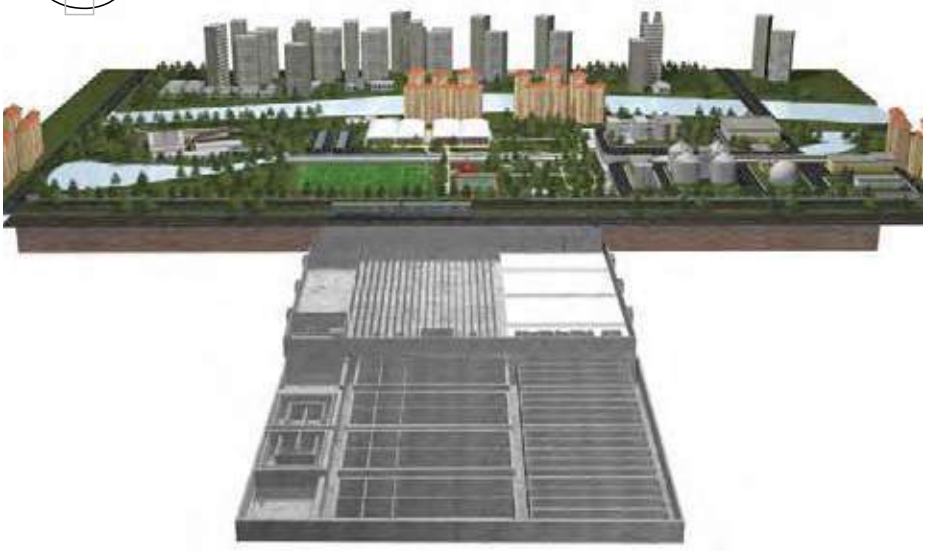
A bio-gas generator converts the methane gases produced during the sludge treatment process to generate up to 700 kilowatts of auxiliary power. Together with solar panels installed atop the parking lots, it supplies 10 to 15 per cent of the plant's power needs.

Rainwater harvesting produces about 80 cubic metres of water a day for toilet flushing and landscaping, while a multi-stage filtration and reverse osmosis membrane system recycles bio-effluent into 2,460 cubic metres of treated water daily for plant operations.

The aquatic skylight over the underground passageway provides natural lighting for the space below with energy savings of up to 30 kilowatts a day, while the wastewater source heat pump facilitates heat exchange with effluent to generate

Bioeffluent pool provides natural light to the plant below

The skylight naturally brightens up the underground plant



The fully underground multi-layered sewage treatment facility goes 17 metres deep

Above ground facilities include a community centre, sports facilities and a 12-hectare public park

a cooling load of 1,200 kilowatts, which drives the air-conditioning system for the administration building and community centre.

SIX YEARS IN THE MAKING

Beginning in July 2011, the project was finally completed after more than six years. Works included the construction of a temporary treatment facility, the underground and above-ground structures, and the installation of equipment, as well as operations and maintenance. The community centre and sports facilities were among the final structures to be constructed.

The project was not without its challenges from surrounding residents, site constraints and technical difficulties. Temporary treatment facilities were provided to deal with continuous incoming sewage flow while underground excavation works were ongoing. During water rationing periods, filtered rainwater was used for concrete mixing, while extensive pumping and plugging of leakage points were required during excavation works due to the high water table. Working with a Chinese contractor also meant dealing with different reference standards, working culture and practices.

PROJECT DATA

Project Name
Pantai 2 Sewage Treatment Plant

Location
Jalan Kampung Pasir 1, Pantai Dalam, Kuala Lumpur, Malaysia

Completion Date
July 2017

Site Area
17 hectares

Owner
Ministry of Energy, Green Technology & Water (KeTTHA)

Implementing Agency
Sewerage Services Department (JPP)

Project Management Consultant
Kumpulan Ikhtisas Projek (M) Sdn Bhd–MECIP (M) Sdn Bhd joint venture

Architecture Firm
Kuek Wee Chien Architect (KWCA)

Design & Build Contractor
BEWG (M) Sdn Bhd (novated from Beijing Enterprises Water Group Ltd, China)

Civil & Structural Engineer
Engineering and Environmental Consultants Sdn Bhd (EEC Sdn Bhd)

Mechanical & Electrical Engineer
SMHB Sdn Bhd

Quantity Surveyor
Perunding NFL Sdn Bhd

Landscape Architect
PTA Design Sdn Bhd

Green Building Consultant
Prudenergy Sdn Bhd

National Concessionaire
Indah Water Konsortium Sdn Bhd (IWK)

Images
JPP; IWK; KWCA

BACFREE®

BACFREE® Complete Water Solutions Provider

Clean, clear and good quality water must be free of impurities, pathogenic agents and devoid of unpleasant odour and taste. Water purification is a challenge faced by everyone. These demands are met by BACFREE® range of water, rainwater and greywater treatment systems. BACFREE® guarantees high quality and reliable range of products and systems through an integrated quality assurance system established and improved over a period of 30 years. At BACFREE®, you are rest assured of prompt and professional service, the hallmark of a time-tested and reliable partner!

Rainwater Harvesting System

Centralized Water Filtration System

Ultra-Violet (UV) Disinfection System

BACTERIA FREE WATER ENGINEERING (M) SDN BHD (156116-A)

Headquaters :
7, Jalan SS13/3F,
Subang Jaya Industrial Estate,
47500 Subang Jaya, Selangor, Malaysia.
Tel: +603-5633 8281
Fax: +603-5633 1785

Subang Jaya Main Showroom
2, Jalan SS19/6,
47500 Subang Jaya,
Selangor, Malaysia.
Tel: +603-5631 7033
Fax: +603-5634 7281

Penang Branch
1-1-2A, Tingkat Mahsuri,
Terrace Plus @ The One,
11900 Bayan Lepas,
Penang, Malaysia.
Tel & Fax: +604-646 8281

Johor Bahru Branch
70, Jalan Persisiran Perling,
Taman Perling, 81200 Johor Bahru,
Johor, Malaysia.
Tel: +607-236 1182
Fax: +607-237 1182

Melaka Branch
24, Jalan KPKS 1,
Kompleks Perniagaan
Kota Syahbandar,
75200 Melaka, Malaysia
Tel: +06-288 8281

2010 Best Brand in Water Filtration Technology

2011 Best Brand in Water Filtration Technology Rain Water Harvesting System

HOMEDEC® 2011 Good Design Award Rain Aid Valve

HOMEDEC® 2011 Quality Award Rain Water Filter Collector

ARCHIDEX® 2012 Green New Product Award Vortex Fine Filter

ARCHIDEX® 2012 New Product Award Pump Buddy

A Member of Water Quality Association

CERTIFIED TO ISO 9001:2008 CERT. NO. AR6185

HOUSEHOLD | COMMERCIAL | INDUSTRIAL | RAINWATER

www.bacfree.com.my

Tel: +603-5633 8281

The curvy bridge is high enough for vessels to pass beneath it, yet with a comfortable walkway gradient

DARUL HANA BRIDGE

Bridges are so much more than a functional access route. From Golden Gate to Tower Bridge, these public infrastructures are iconic landmarks that help shape the cities they represent.

The Darul Hana Bridge in Kuching, Sarawak, is intended to complement the new State Legislative Assembly Complex (DUN) to form a dynamic urbanscape—set against elegant parks and water features—that will be intrinsically linked to the identity of the city.

Officially opened in November 2017, the RM35 million bridge provides pedestrian access from the Kuching Waterfront in the south of the city to the new DUN, the Botanical and Orchid Gardens and beyond in the north. It will also provide pedestrian access from the surrounding villages to the city centre attractions, such as the Plaza Merdeka shopping mall, the international hotels strip and the cafés at the old Court House.

DESIGN AND FORM

The bridge form was developed in Kuching by Ng Chun Chien and Kamal Fozdar using cutting-edge 3D-modelling (RHINO) and structural analysis software (SAP2000). A MAKERBOT 3D-printer was used to produce accurate scale models of the bridge and its key components.

Designed with aesthetics and ergonomic considerations, the bridge is an S-shaped

The iconic bridge complement the new State Legislative Assembly Complex

3.25-metre-wide walkway that meanders 335 metres over the Sarawak River. Its curved plan allows a comfortable walkway gradient that is suitable for access by disabled persons, while still providing sufficient clearance for river vessels to pass beneath it. It also orients the bridge towards particularly attractive surrounding viewpoints.

Inclined concrete columns branching from the base of each tower support elliptical egg-shaped viewing platforms. Each platform is 30 metres long by 10 metres wide and covered with a golden roof to match the roof of the nearby DUN.

Nine inclined concrete 'fingers' support the sharply curved approach span at the Waterfront end of the bridge—the number of 'fingers' correspond to the number of points on the star at the centre of the state flag.

CONSTRUCTION

The bridge comprises two towers, a network of double-galvanised cables and a precast concrete walkway deck for a three-dimensional structural system that is light and naturally resistant to dynamic pedestrian-induced vibrations.

The load-bearing structure consists of a curved, one-side supported steel tube truss superstructure with two outwards inclined steel masts. The bridge was erected using the balanced cantilever method and built on three sets of in-river bored pile foundations.

The main bridgeworks subcontractor worked with Stuttgart-based construction engineers SchlaichBergermann Partners to develop a construction methodology that removed the need for mid-river supports.

Despite the site constraints and other challenges, an efficient project execution plan and successful collaborations among various stakeholders helped to minimise construction risks involved in working on the Sarawak River.

SIGNIFICANCE

The bridge's steel spaceframe is suspended from two 50-metre-high steel towers that are angled steeply away from each other. Even though the towers pull in opposite directions, by carefully fine-tuning the walkway curvature and tower inclinations, the designers were able to balance all forces and keep all elements in harmony. This symbolises the state leaders' efforts to bring balance and harmony in a multiracial and multicultural society.

The web of angled wires is reminiscent of the arched wings of a traditional Bidayuh bamboo bridge. When viewed from afar, the towers and cables resemble stylised hornbills—the state's emblem. The bridge stands as a homage to its name—derived from Sarawak's full name under the Brunei Sultanate, Sarawak Darul Hana—which means 'Home to Peace and Tranquillity'.

A light structural system that is naturally resistant to dynamic vibrations

Covered viewing platforms branch out from each tower

PROJECT DATA

Project Name
Darul Hana Bridge

Location
Kuching, Sarawak, Malaysia

Completion Date
11 November 2017

Tower Height
50 metres

Bridge Length
335 metres

Walkway Width
3.25 metres

Client
Government of Sarawak

Implementing Agency
Sarawak Economic Development Corporation (SEDC)

Turnkey Contractor
PPES Works (Sarawak) and Naim Land Sdn Bhd (joint venture)

Principal Designers
Ng Chun Chien; Kamal Fozdar

Civil & Structural Engineer
KTA (Sarawak) Sdn Bhd

Mechanical & Electrical Engineer
KTA (Sarawak) Sdn Bhd

Quantity Surveyor
PUBM Quantity Surveyors Sdn Bhd

Lighting Consultant
Philips Lighting Malaysia

Bridgework Contractor
SediaBena Sdn Bhd

Images
KTA (Sarawak) Sdn Bhd

A resort-like environment

THE MANSION @ GASING

Repolished terrazzo flooring

Nursing homes are stereotypically depressing institutionalised places, but The Mansion in Petaling Jaya is a deliberate attempt to shed such stigma.

The assisted-living home would serve semi-active elderly residents, early-stage Alzheimer's and dementia patients, stroke and post-operative patients, on both a short- and long-term basis.

It would also have to be able to accommodate multiple social activities running concurrently, from mahjong sessions and karaoke to qigong and other morning motion exercises.

NEW BEGINNING

The design and construction took seven months to complete. The project involved the redevelopment of two adjacent colonial bungalows into a 30-bed premier nursing home.

The two rental bungalows were previously used as a corporate warehouse and were in poor shape. The wooden flooring on the second-storey of one of the bungalows was found to be structurally unsound due to termites—the whole floor had to be completely torn down and replaced within budgetary and time constraints.

Landscaped compound with local plants and red-bricked paths

On the upside, this allowed for a completely new façade and flooring. The wood was replaced with a steel structure, a glass façade was added, and the upstairs rooms were reconfigured for more open space.

A PLACE TO CALL HOME

With the elderly and disabled, accessibility is at the forefront of the design considerations. Residents should be able to move around freely and unobstructed, yet always remaining safe. Grab rails are installed at every corridor and bathroom, as well as shower seating, stair lifts and ramps.

Multiple lounge areas and even a sports pavilion (with a ping-pong table) have been created for social interactions and for residents and their families to spend time together.

The traditional terrazzo flooring—characteristic of the 1960s architecture of Petaling Jaya bungalows—was repolished to evoke the old-time charm, complemented by practical wood-textured vinyl flooring. The old window pane louvres were retained, while old timber beams that had to be taken out of the building were reused as timber linings across the water features.

To incorporate a tropical environment, the layout is kept as open as possible, with outdoor spaces as a priority. A steel roof structure was added for the outdoor dining area, as well as a water feature and artificial turf alongside the perimeter of the building.

The compound features local plants and landscaping by locals from the Sungai Buloh hillside, as well as traditional coal-burnt red-bricked paths. The home is also developing its own vegetable farm, which will provide about 30 per cent of the residents' food source.

Multiple lounge areas for social interaction

Stair lifts installed for access to upper floors

Sports pavilion

PROJECT DATA

Project Name
The Mansion @ Gasing

Location
136, Jalan Gasing, Petaling Jaya, Malaysia

Completion Date
August 2017

Site Area
1,600 square metres

Gross Floor Area
580 square metres

Building Height
2 storeys

Client
Sawara Care Sdn Bhd

Architecture Firm
KYA Architects

Principal Architect
Martin Yap

Main Contractor
NKK Construction Sdn Bhd

Interior Fit-Out Contractor
NKK Construction Sdn Bhd

Images
Sawara Care Sdn Bhd

HQ in Rotterdam, Hunter Douglas, a publicly traded company founded in 1919 in Dusseldorf, Germany, mainly engages in manufacturing, marketing and service of Architectural products and Window Covering Products. Comprising 132 companies, including NBK Terracotta, and 50 manufacturing bases. In more than 100 countries in five operational regions including Europe, North America, Latin America, Asia and Australia.

Over the last 90 years, Hunter Douglas, as a market leader in the industry, has helped to turn countless innovative sketches into innovative buildings.

"Not only are the world's architects and designers our partners, they're our inspiration. As they continue to raise the bar for excellence, we're creating products to bring their visions to life".

HunterDouglas

Modern Interpretation Of Traditional Elements

NBK terracotta panels come in more colours and more textures than any other rainscreen façade, creating stunning architectural statements that last.

nbkterracotta.com

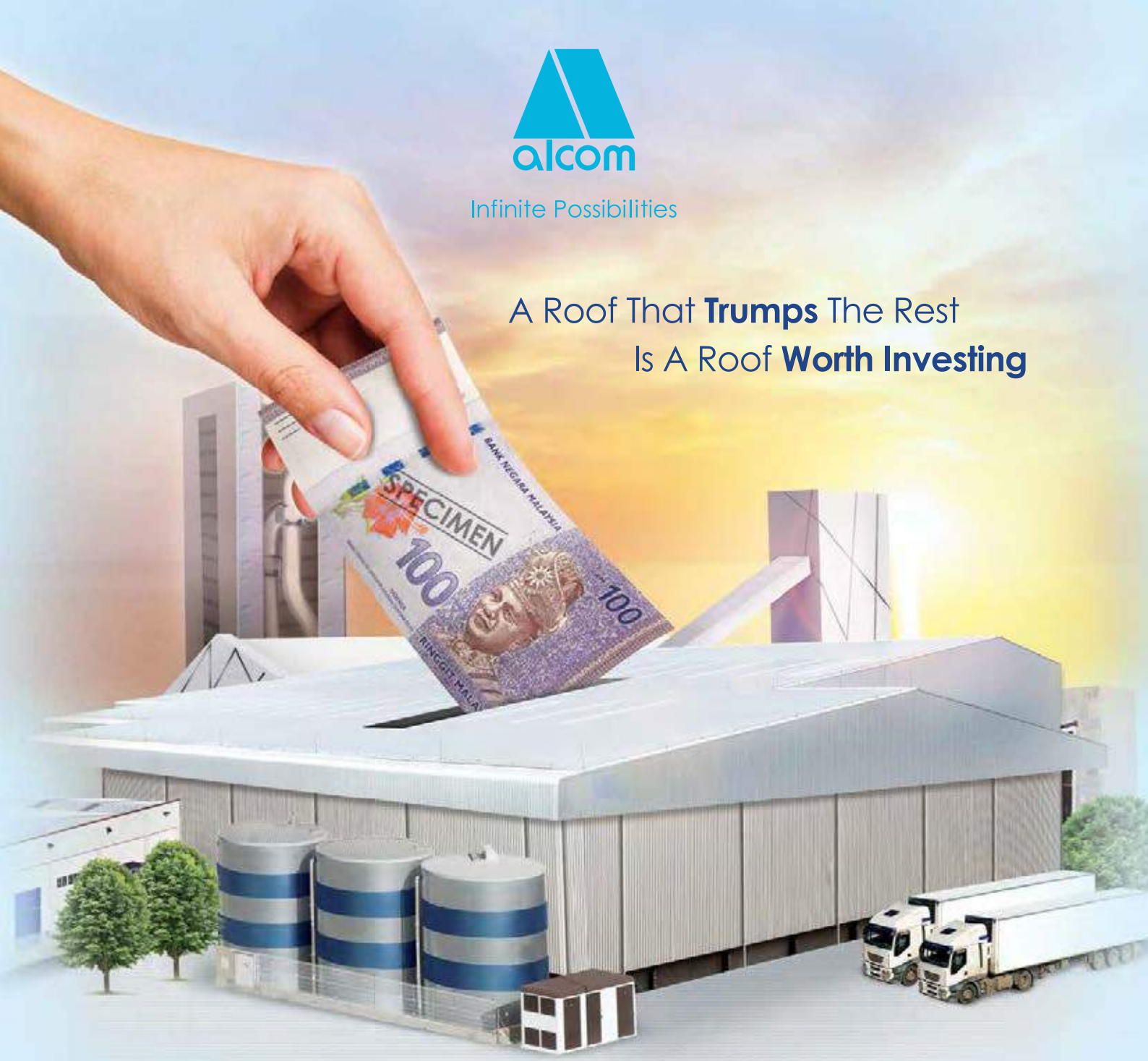
®NBK | ARCHITECTURAL TERRACOTTA

Division of Hunter Douglas

alcom

Infinite Possibilities

A Roof That **Trumps** The Rest Is A Roof **Worth Investing**



A Roof of Quality, Durability & Continuous Appreciation

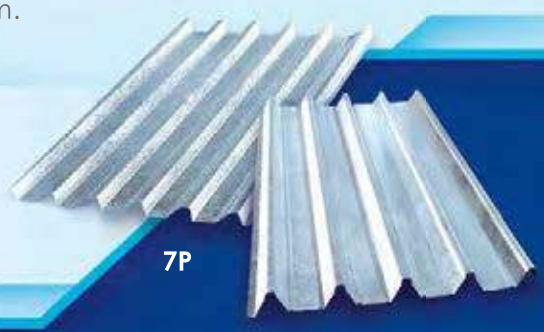
Assets, alike anything else that's fundamental to us, requires protection. A good roof protects your assets, making sure you don't lose money in the process of earning. Therefore, invest in a long term, high-valued asset - **ALCOM's aluminium roof**. It is of value now and of even greater value in the future, thanks to the constant rise in price of aluminium.

Natural Resistance & Durable

Lightweight

Value for Money

Reflects Heat



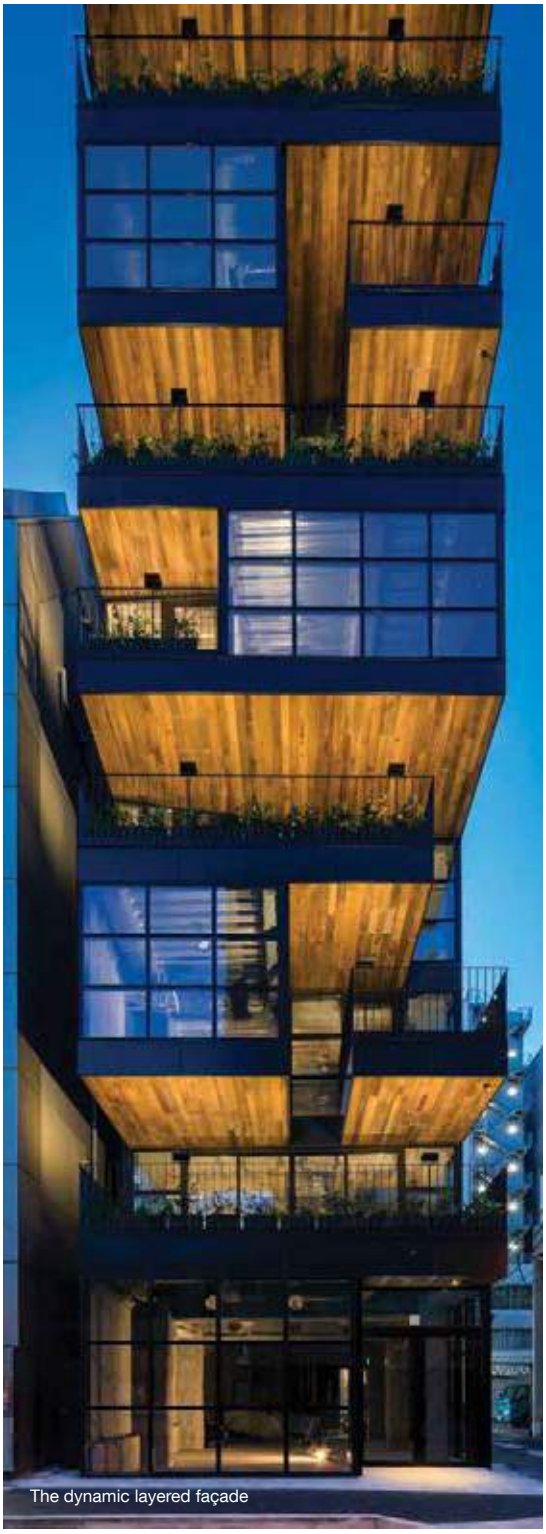
Aluminium Company of Malaysia Berhad (3859-U) | www.alcom.com.my

A glass-clad building of restaurants in central Tokyo

KANDA TERRACE

The upper floors are accessible from the backstreet

View from the south east corner

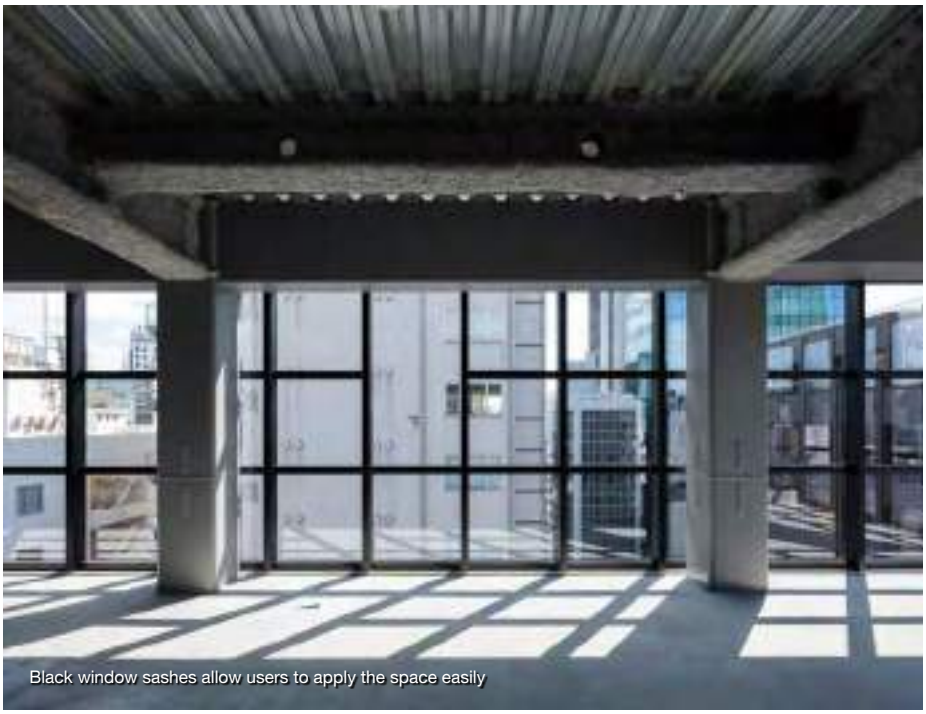

The dynamic layered façade

Located in a central Tokyo neighbourhood with many low- and mid-rise office buildings, this rental building for restaurants stands on a long, narrow lot, surrounded by streets on three sides.

Key considerations when designing a building of this type are how to create a group identity for the tenants and how to relate the units to the cityscape. Because of its city-centre location, this mid-rise building needs to be commercially efficient, occupying the entire permissible floor–area ratio and filling that space with restaurant tenants on every floor. It was therefore essential to set up an attractive, bright and welcoming environment for visitors and passers-by.

The position of the access to each floor was carefully examined during the design process. Each floor is intended for one tenant, to ensure an effectively functioning building with a brief waiting time at the elevator. The vertical flow of the external staircase and elevator was pushed to the back façade, keeping the second and upper floors easily accessible from the backstreet (crowded with nearby eateries), while the first-floor restaurant has its main access along the front road. This strategy enables the front road façade to be free of additional structural elements and to be fully glazed without visual obstructions.

The terraces connect to the street and the larger neighbourhood



Black window sashes allow users to apply the space easily

The building has a recessed façade with three-dimensional stacked terraces, protruding into the space on each floor. The size and shape of these terraces vary by floor, creating a layered form that changes as it moves upwards. In typical multi-storey restaurant buildings, tenants are completely independent of one another, but in this building, they can interact through the terraces of this vertical garden, creating opportunities for customers at each restaurant to visit the others. Furthermore, this dynamic façade is made of glass, allowing people outside to look into the restaurants. In response to its context, the building, like a porous volume, encourages the terraces on each floor to connect to the street and the larger neighbourhood. In doing so, it aims to take on a public character.

The black joinery work and frames, while avoiding an office-like appearance on the outside, allow each restaurant unit to stand out clearly from each other. For the interior spaces, the black window sashes, neutral and basic, allow users to apply the space easily. The use of locally available materials kept the project within its limited budget and reduce the overall cost and building period.

PROJECT DATA

Project Name
Kanda Terrace

Location
Chiyoda-ku, Tokyo, Japan

Completion Date
September 2017

Project Site Area
154.91 square metres

Gross Floor Area
986.03 square metres

Building Height
9 storeys; 34.48 metres

Number of Units
10 rental spaces

Architecture Firm
Key Operation Inc

Principal Architect
Akira Koyama

Interior Design Firm
Key Operation Inc

Structural Engineer
Delta Structural Consultants

Mechanical & Electrical Engineer
Comodo Facility Plan Ltd

Lighting Consultant
Key Operation Inc

Facility Planner
Comodo Facility Plan Ltd

Main Contractor
Satohide Corporation

Images
Shigeo Ogawa

HALIO™
living with light

SMART-TINTING GLASS SYSTEM

TRANSFORMING NATURAL LIGHT MANAGEMENT WITH GLASS

Halio™ is a technological breakthrough in architectural glazing paving the way for more precise control over daylight. Whether it is for building façade or interior, Halio creates an interactive and intelligent building design element built to connect occupants with the external environment. Whether with manual or automated controls, Halio offers a greater freedom in design. Halio delivers fast and smooth transitions from clear to its darkest tint seamlessly within three minutes; providing comfort and glare relief all in a laminated or double glazing unit.

- Halio can block up to 99.9% of visible light
- Reduces glare and improves thermal comfort for occupants
- Intelligent design for manual and automated control
- Increases energy savings and improves energy efficiency

Halio International SA/NV | E: halio.asia@agc.com | P: +65 6273 5656 | www.halioglass.com

The double façade acts as a second skin

PEAK OFFICE

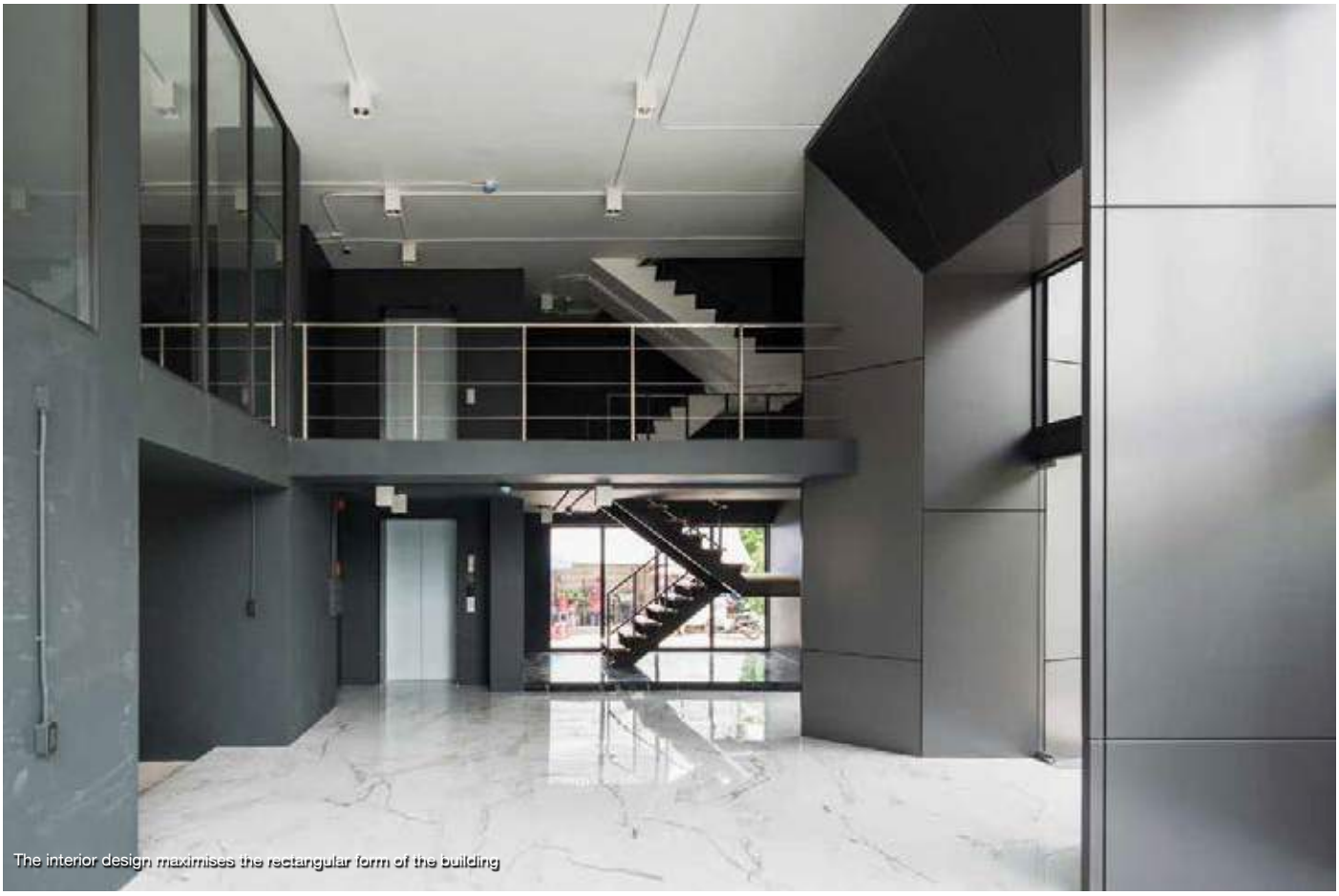
The physically and visually dynamic façade adds character to the building

Peak Office is located on the central corner site of Sriwara road, inside the Town in Town neighbourhood, where many production houses, designer firms and creative offices are situated. The architect kept the building height aligned with the surrounding structures while projecting a sense of affiliation to the community through its façade design.

The programme consists of three main sections, with the ground floor holding the parking and reception areas. The area from the second to the fourth floor hosts the office space for rent, with the top floor as the owner's residence. The architect maximised the building's rental area with a rectangular architectural mass that takes up almost the entire land area. The post-tensioned floor system used for the structure allows for the project to include more floors.

The owner's personality and passion for car racing are expressed through the physically and visually dynamic façade. The building's façade is divided into two parts and constructed from different materials. The first part, with the undulating wooden strips, helps lessen the 'stiffness' of the box-shaped mass, resulting in a visually energetic elevation that delivers 'movement' to the building. The second part, made up of a series of horizontal grills, functions as the shell that wraps the three sides of the building's glass exterior. The louvred screen allows for privacy while still enabling a visual connection to the outside. Certain parts of the programme are turned into green spaces, following local building laws and regulations.

The undulating wooden panels express a sense of movement



The interior design maximises the rectangular form of the building

Interstitial space between the double façade

Louvred panels offer privacy while retaining a visual connection to the exterior

The architectural mass takes up almost the entire land area

PROJECT DATA

Project Name
Peak Office

Location
Sriwara, Bangkok, Thailand

Completion Date
2017

Site Area
1,200 square metres

Building Height
5 storeys; 14.8 metres

Client/Owner/Developer
Maison Garden

Architecture Firm
Pure Architect Co, Ltd

Principal Architects
Kiengkiat Chuenterawong; Pamornpong Wongpeng; Pimonphan Kinkul (coordinating architect)

Civil & Structural Engineer
J&K Group Engineering

Mechanical & Electrical Engineer
TS Electric Engineering

Main Contractor
J&K Group Engineering

Images
Beersingnoi ArchPhoto

TROX® TECHNIK

The art of handling air

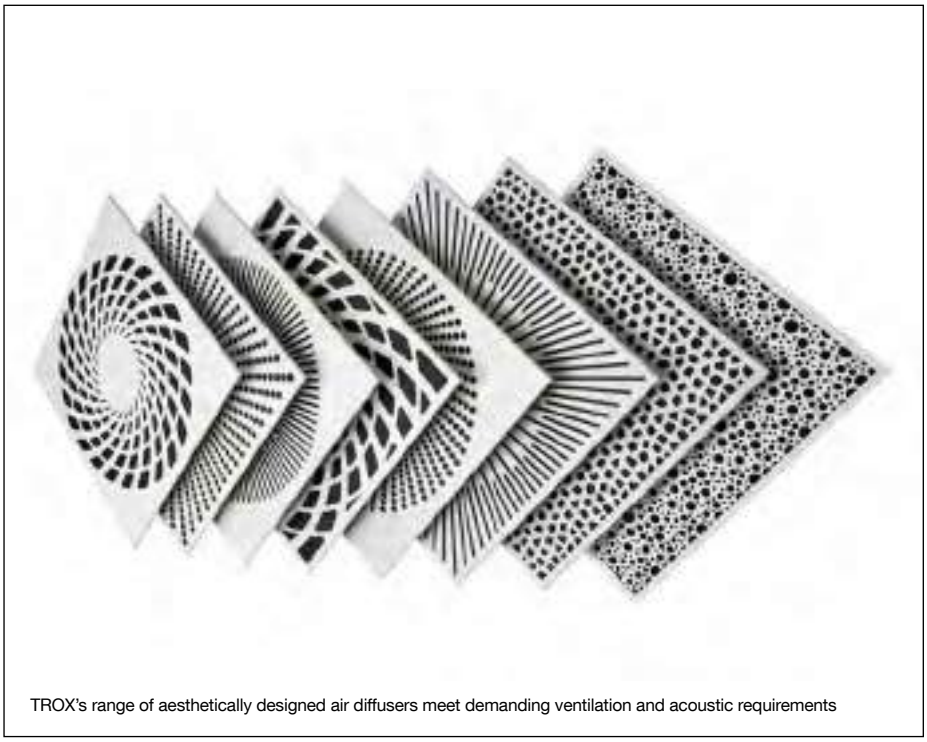
Tranquility in an urban lifestyle

Energy efficient
air water systems reduce
power consumption
of the building yet provide
thermal comfort and
improve indoor air quality.

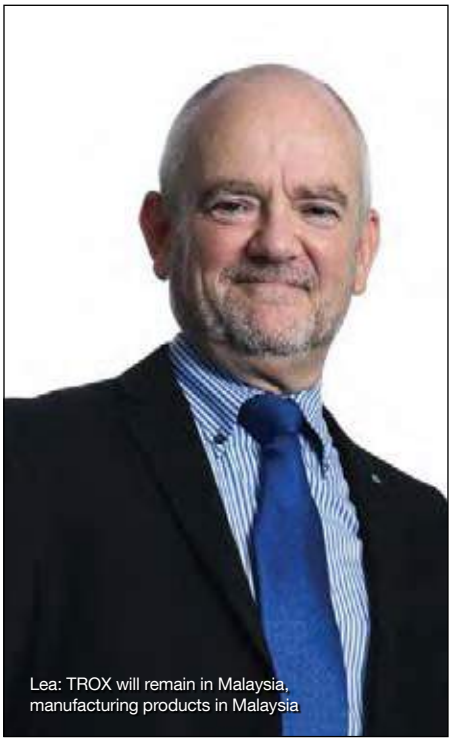
Stylish concepts that
shapes an inspirational
work environment.

www.troxapo.com

TROX MALAYSIA



TROX's range of aesthetically designed air diffusers meet demanding ventilation and acoustic requirements



Lea: TROX will remain in Malaysia, manufacturing products in Malaysia

The TROX Group is the leader in the development, manufacture and sale of components, products and systems for indoor air-conditioning and ventilation.

Headquartered in Germany, the group entered Malaysia in 1995. Since then, TROX has proven itself to be a reliable global partner providing excellent technical knowledge and high-quality products that are manufactured in Malaysia.

Some of the large local projects that TROX has been involved in include the Petronas Twin Towers, the Klang Valley Mass Rail Transit, Universiti Teknologi Petronas R&D Building and the refinery and petrochemical integrated development project (RAPID) in Pengarang, Johor.

Philip Lea, Senior Vice President of Sales, Asia Pacific Operation, informed *Construction+* that "all these projects actually have very diverse requirements, but they all demonstrate that when it comes to air-conditioning, TROX is a reliable partner to work with."

"That is the strength of being part of a large group as we can utilise resources within TROX from all over the world to ensure that we assist locally in the best possible manner."

INNOVATIONS

The ubiquitous four-way ceiling diffusers in Asia was one of first diffuser designs introduced by TROX back in 1952. In early 2000, the company engineered a new range of aesthetically-pleasing swirl diffusers called XARTO, available in 10 different face patterns to suit most interior ceiling designs. TROX also works with interior designers to develop customised aesthetics, combined with TROX functions, to ensure optimum indoor air quality.

Since the late 1980s, TROX has also manufactured chilled beams, which are a relatively new concept in Asia but well established in Europe, US and Australia. "With increasing energy costs, we believe that chilled beams are the future due to the reduced energy consumption that they enable," says Lea.

"TROX has now developed a new concept chilled beam called DID-EW for hotel rooms and patient rooms in hospitals. This beam fits beautifully into modern hotel room designs and creates a quieter, more comfortable and hygienic environment for guests."

GROWTH PLANS

In Malaysia, TROX plans to transform from a component manufacturer into a system supplier to further assist designers and installers. Its new state-of-the-art test facility, set up in 2015, can help simulate the actual installed condition of TROX products and solutions, with mock-up tests that demonstrate the functions, providing additional confidence to customers prior to manufacturing and installation.

TROX Malaysia has also invested in a factory extension, which will open later in 2018. "These long-term investments give our customers confidence that we are not only adapting to the changing needs of the market, but that TROX will remain in Malaysia, manufacturing products in Malaysia."

Brought to you by TROX MALAYSIA

BCI ASIA IDA INTERIOR DESIGN AWARDS 2018

MALAYSIA

Held for the second year running, BCI Asia's Interior Design Awards (IDA) recognises interior architectural designs that stand out aesthetically, functionally and ergonomically. The winning entries showcase creativity and promote excellence in interior spaces. The competition also seeks to generate awareness towards responsible designs (human, economic, environmental, ethical).

About 200 entries for IDA 2018 were received from Malaysia, Hong Kong, Indonesia, Philippines, Singapore, Thailand and Vietnam. Completed projects had to be built within 2016 and 2017, while projects at concept stage had to be finalised for construction on or before 31 December 2018. IDA 2018 is supported by Gold Sponsor TROX Malaysia Sdn Bhd.

CONGRATULATIONS to the winner and merit recipients from Malaysia:


Ooi Boon Seong


Taufiq Jaapar

WINNER

IM4U YOUTH SENTRAL

Schools

OOI DESIGN & ASSOCIATES SDN BHD

A communal hub for youth volunteerism that was commissioned and designed to provide Malaysian youths accessible and affordable facilities, including a youth hostel, retail studios, co-working spaces, sports facilities and art galleries.

MERIT RECIPIENTS

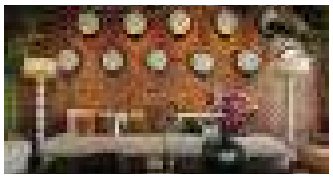
DAMANSARA AVENUE SALES GALLERY
Ooi Design & Associates Sdn Bhd
Exhibition

DE GALLERY
DAA Design Associates Sdn Bhd
Residential

SOFITEL KUALA LUMPUR DAMANSARA
Wilson & Associates, LLC
Hospitality

IBIS MELAKA HOTEL
Aprilist Associates Sdn Bhd
Hospitality

MONOCHROMATIC CRUSH
MX Design
Residential



ROSA MALACCA
Rosa Hotel Sdn Bhd
Hospitality

MERU HOUSE
A3 PROJECTS
(formerly known Arch Cubic)
+ Kenny Chong Architect
Residential

INTERIORS

IM4U YOUTH SENTRAL

Ten years after it was first completed, the Kompleks Rakan Muda Puchong has been upgraded into a modern communal hub for youths.

The iM4U Youth Sentral seeks to provide accessible and affordable community facilities for the younger generation. Its new design boasts a more striking and appealing visual presence, incorporates better organised spaces and injects flexible public areas that promote private and public interactions within the premise.

REVAMPING THE OLD

The existing facility sits next to the Puchong Industrial Park, a growing commercial and light industrial area, right next to a new LRT station.

It comprised two building blocks—an administration and hostel block with sub-basement car park, and a sports and events block—linked together with a canvas canopy structure that stretches over ramps, kiosks and seating.

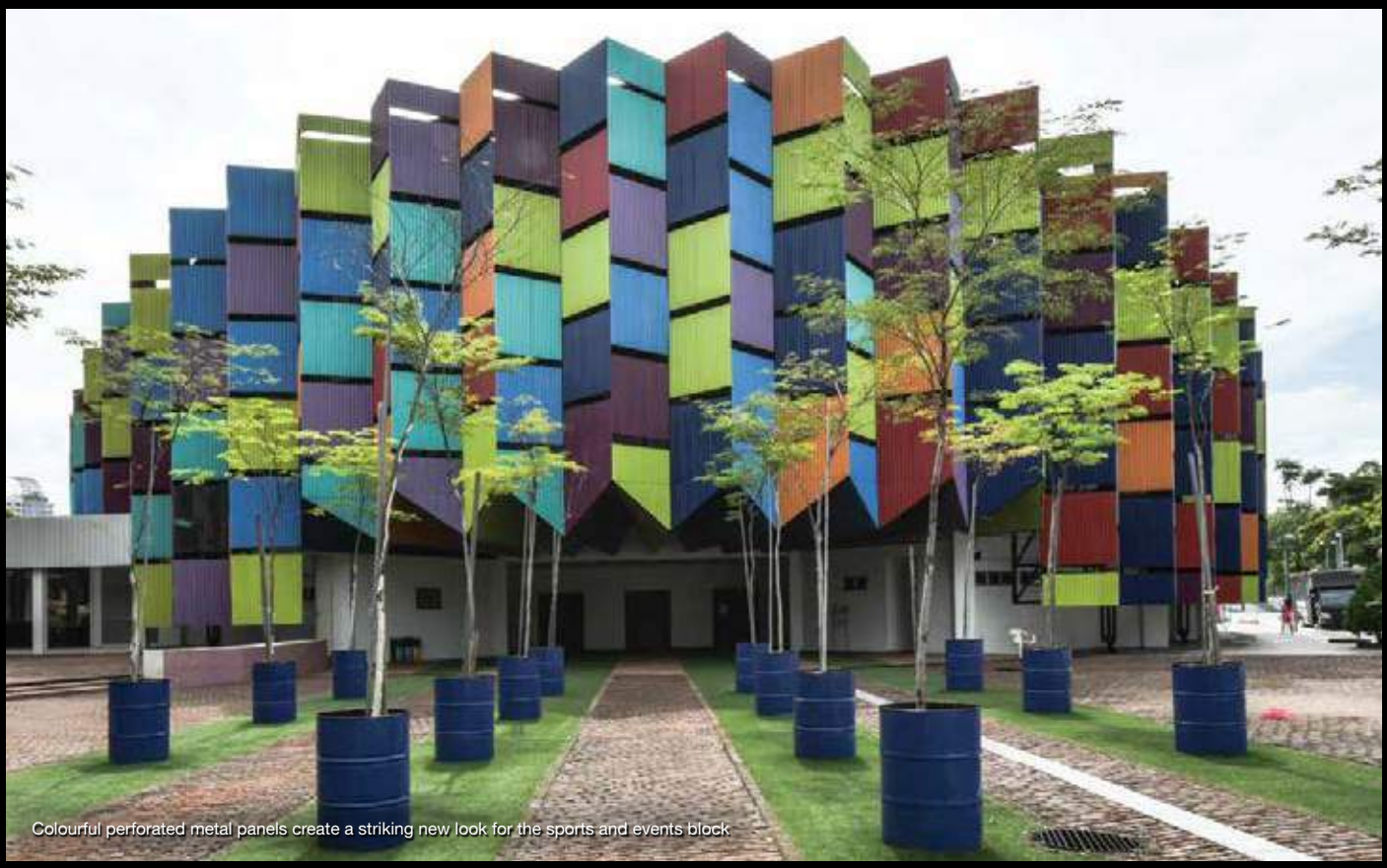
Most of the interior spaces were bricked up with conventional-sized window openings, resulting in minimal visual connection to activities in the building. The internal areas in the sports and events block had large volumetric spaces that were closed up with a low ceiling heights and poor natural lighting.

INJECTING LIFE

One of the main changes was the creation of a more welcoming entrance from the main road by demolishing the existing fence and guardhouse along the Damansara–Puchong Highway (LDP). The original main entrance was too close to the LDP flyover exit, hence, a new slip road was introduced to move vehicular access to a safer and more convenient location.

For a fresher look, the designers worked with colours, textures and inexpensive materials. Both buildings sport new façade cladding—vibrant multi-coloured perforated metal panels and vertical gardens—that screen off undesirable views without sacrificing permeability. Transparent materials, such as glass and polycarbonate, replace selected brick walls at selected areas for better natural lighting. Digital and conventional media panels help generate income to support the operation of the complex.

The 'clutter' at the central spine has been removed and replaced with a small piazza that unifies the site and connects the two buildings together, while increasing natural daylight and ventilation to the interiors. The piazza also increases leasable frontage for small retail studios and becomes a space for entertainment and recreational activities.



Colourful perforated metal panels create a striking new look for the sports and events block

Radio station feature wall comprising 1,000 cassettes collected from the public

Art installation with recycled materials

REORGANISED SPACE

The mixed-use building programme takes advantage of the flexible spaces provided. The administration and hostel block is dubbed the Green Wing, complete with a vertical garden wall façade. It includes an open gallery exhibition space for young artists, retail studios and an international youth hostel. Equipped with virtual studio and office facilities, the Green Wing also serves as the start-up centre for budding careers and the development of various volunteer groups.

The sports and events block is known as the Youth Factory, a centre for cultivating young talent in sports and music. A new platform deck linking the first floor of the Youth Factory with the courtyard below makes the building seem less imposing, while allowing a vehicle-free access to the LRT station. The space beneath the platform allows an F&B drive-through outlet, the insertion of cabin studios at the soffit of the new slab, and additional 35 parking bays. A semi-outdoor wall-climbing facility has been added at the rear entrance.

SUSTAINABLE LIFESTYLE

Sustainable strategies and initiatives include rainwater harvesting, a recycling collection centre, louvered glass windows for natural light and ventilation, and porous surfaces to reduce heat gain.

Many flexible public spaces have been strategically designed within the premise unify people and the buildings. The piazza connects all the site's amenities with clearly defined rubber turf paths, marked with linear line patterns, to encourage visitors to walk or cycle around. New lifts are introduced to assist the disabled, along with fire escape staircases.

Landscaping plays an important role, with a cluster of Casuarina trees at the piazza for shade, and trees planted along the boundary. Youths were invited to participate in the design outlook, from mural painting to using upcycled and recycled items for feature walls and installations, for a sense of ownership and belonging.

Hip, vibrant and distinctive—the iM4U Youth Sentral has set itself apart as a showcase of what youth volunteer centre can and should be.

Wood found around the site upcycled into wall art installations and a small stage

Autism café

Art pieces made from leftover construction materials

Cosy hangout spots

A reminder of commitment to sustainability

PROJECT DATA

Project Name
iM4U Youth Sentral

Location
Taman Perindustrian Puchong, Puchong, Selangor, Malaysia

Completion Date
January 2016

Gross Floor Area
7,530.85 square metres

Building Height
The Green Wing: 4 storeys; The Youth Factory: 2 storeys

Client
1 Malaysia for Youth

Interior Design Firm
Ooi Design & Associates Sdn Bhd (OD&A)

Lighting Consultant
OD&A

Mechanical & Electrical Engineer
Gabungan APS Holdings

Quantity Surveyor
Gabungan APS Holdings

Interior Fit-Out Contractor
Gabungan APS Holdings

Images
OD&A

EBAC HOME

KITCHEN CABINETS • WARDROBES • VANITY CABINETS
HOME APPLIANCES • SANITARY WARE

PROUDLY DESIGNED UNITED KINGDOM

ELR®
bright ideas

WARM DIM

Bring 'sunset' indoors.

To learn more, please visit
www.elr-group.com/technology-warmdim/

product design award 2014

reddot design award
product design 2012

SIRIM

Director's office

GUOCOLAND OFFICE DAMANSARA CITY

This property group's office occupies two full floors of its new building in Damansara City, Kuala Lumpur. The main goal of the project was the creation of a statement space to greet guests and a functional space for employees from various departments.

A co-creation exercise was carried out to generate areas for connection, concentration and innovation that help promote well-being and efficiency practices; generate integration between different work teams; stimulate natural and spontaneous collaborations; and reflect the group's corporate identity both to internal and external users. The project also had to be completed and fitted out in a short time to minimise downtime.

The result is a sophisticated and bold design concept complemented by sleek detailing. One level has been converted into a main reception area, along with meeting rooms and the workspaces, while the upper level holds the directors' rooms, boardrooms, training space and more workspaces.

FLOOR 13

The limited ceiling height challenged the design team to fit in a statement 'installation' while still achieving a spacious interior. The solution was to create a striking graphical pattern on the floor using carpet tiles to lead and welcome guests to the lounge area.

The floor pattern, installed monolithically and layered diagonally for a dynamic effect, helps amplify the main reception area. Highlights of denim blue—the colour of the client's brand—are used to create a striking contrast against the neutral surrounding tones.

Waiting lounge

Vertical wood strips on the walls and louvres on the ceiling add warmth to the space, while large vertical light boxes diffuse a soft ambience in the lounge area. The meeting spaces have been integrated close to the reception to facilitate quick meet-ups while maintaining some form of transparency.

A host of wall panels double as cabinets to divide the function of each space, yet continuity of space is not neglected thanks to the carpet tiles design.

FLOOR 13A

The concept of strength is key to this floor, and this is generated using a warm palette, rich textures and solid colours to reflect the company's brand image. For example, the waiting area's walls are wrapped in dark grey stainless steel, finished with anodised gold inserts.

The combination of open and closed spaces was designed to create collaboration and privacy. The spatial distribution allows transparency and integration of artificial light. A coffee area is included for use by all group employees to promote socialisation.

One challenge was the office's all-round glazing, which results in harsh lighting and heat. Thus, the larger common areas are confined to the centre of the core, while smaller rooms with specific temperature control line the sides of the building.

Design standards include environmental characteristics and certifications, such as GBI and LEEDS, in an effort to reduce the environmental impact from the office relocation exercise. C

Wall panels double as cabinets for multi-function use

Boardroom

Break out area for staff socialisation

PROJECT DATA

Project Name
Guocoland Office Damansara City

Location
Levels 13 & 13a, Wisma Guocoland, Damansara City, Bukit Damansara, Kuala Lumpur, Malaysia

Completion Date
May 2017

Office Gross Floor Area
37,000 square feet

Storeys
2

Developer
Damansara City Sdn Bhd

Design Consultant
P&T Consultants Pte Ltd

Executive Architect
Kumpulan Senireka Sdn Bhd

Interior Design Firm
SWOT Design Group

Creative Director
Sean Yeap

Civil & Structural Engineer
Asia Pacific Engineering Consortium (APEC) Sdn Bhd

Mechanical & Electrical Engineer
Li-Zainal Sdn Bhd

Quantity Surveyor
JUBM Sdn Bhd

Traffic Consultant
Perunding Trafik Klasik Sdn Bhd

Lighting Consultant
Lightwave Lighting Design Sdn Bhd

Landscape Architect
Pentago Landscape Sdn Bhd

Earthworks and Piling
Aneka Jaringan Sdn Bhd

Basement Contractor
SsangYong Engineering & Construction Co Ltd

Main Contractor
Daewoo Engineering & Construction (M) Sdn Bhd

Interior Fit-Out Contractor
Jalex Sdn Bhd

Images
SWOT Design Group

Hinged shower door with in-line panel and frosted hinged toilet door with chrome fittings.
Solid surface illuminated basin unit with inset concrete effect panel and integrated mirror column.

Roman is the leading UK shower manufacturer and as such we are experienced in large project work and frequently create bespoke solutions to suit individual customers' briefs. We have worked on projects Worldwide, most notably across Europe, the Americas, Asia Pacific and the Middle East.

Our products are manufactured in our UK headquarters and we also have a showroom and manufacturing facility set up to serve the Asia Pacific market, Roman Asia, which is based in Kuala Lumpur.

Roman build a bathroom concept to totally suit the individual project. We not only design and manufacture the showering solutions with our vast range of shower enclosures and wetroom panels but we produce Corian Solid Surface Fabrication to create bathroom basins; vanity units; and the complete bathroom structure.

The Black Grid Design Wetroom Panel has been introduced to Roman's Liber8 Range with 10mm thick glass and a height of 2000mm. The Black Grid Design printed glass leads the industrial look trend that is very current in bathroom design. There is also the option of clear glass with the matt black profile, which can be coordinated with brassware across the bathroom.

To request a brochure:

Asia Sales:
Tel: + 603-8727 8816
Fax: + 603-8727 8896
Email: asiasales@roman-showers.com

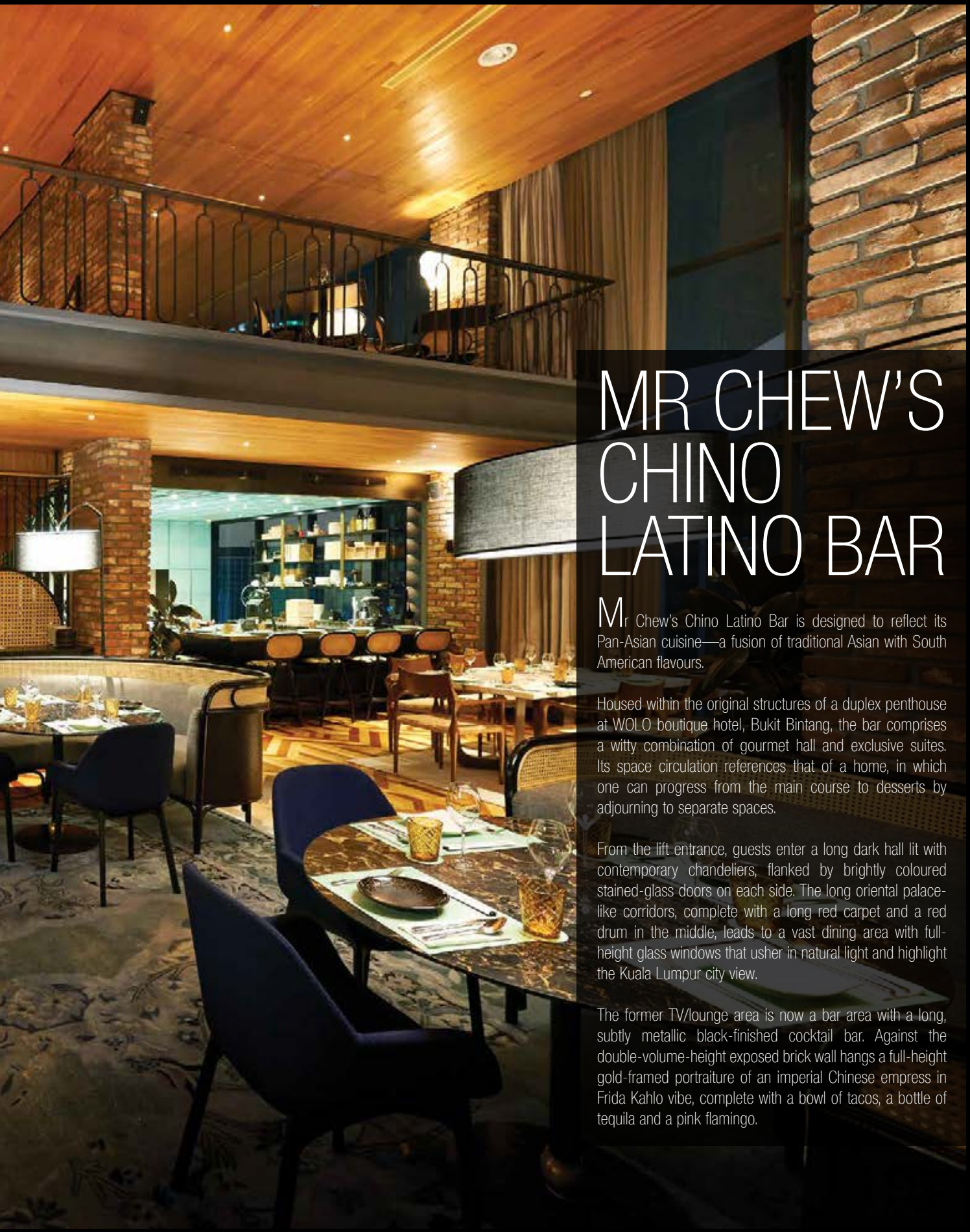
Roman Asia Sdn Bhd (091603-K)
No.6, Jalan Olivin, Taman Industri Sungai Purun,
43500 Semenyih, Selangor, Malaysia

www.roman-showers.com/international/en/

MADE IN BRITAIN

ROMAN®
lifetime luxury

Variety of classy seating options



MR CHEW'S CHINO LATINO BAR

Mr Chew's Chino Latino Bar is designed to reflect its Pan-Asian cuisine—a fusion of traditional Asian with South American flavours.

Housed within the original structures of a duplex penthouse at WOLO boutique hotel, Bukit Bintang, the bar comprises a witty combination of gourmet hall and exclusive suites. Its space circulation references that of a home, in which one can progress from the main course to desserts by adjourning to separate spaces.

From the lift entrance, guests enter a long dark hall lit with contemporary chandeliers, flanked by brightly coloured stained-glass doors on each side. The long oriental palace-like corridors, complete with a long red carpet and a red drum in the middle, leads to a vast dining area with full-height glass windows that usher in natural light and highlight the Kuala Lumpur city view.

The former TV/lounge area is now a bar area with a long, subtly metallic black-finished cocktail bar. Against the double-volume-height exposed brick wall hangs a full-height gold-framed portraiture of an imperial Chinese empress in Frida Kahlo vibe, complete with a bowl of tacos, a bottle of tequila and a pink flamingo.

Long corridor resembling an Oriental palace

The mix of old-city heritage laced with the rich textures of the dining upholstery reflect the visual vibrancy of both Asian and South American cultures. The combination of bright blues, greens, wicker and geometric parquet creates an eclectic oasis of funky flavours.

The bar seating area consists of seats segregated by high-backed sofas, providing intimate spaces shielded from high traffic. Farther from the bar, there are open seats that cater for larger numbers, allowing a clear view of the beautiful waves of the preserved marble table tops.

In another area, the six-course dessert bar is framed overhead by mint-green timber panels, while the bar stools are upholstered with water-coloured Christian Lacroix fabric. The centrepiece is a vintage ice shaving machine, while an extensive white marble counter top provides a showcase of dessert degustation. Beside the bar, a patterned metal screen subtly hides an open staircase leading upstairs.

The bedrooms have been converted into semi-private compartmentalised dining spaces, tucked behind the stained-glass doors at the main corridor. These come with sofa lounges, with plush cushions lining the walls, creating a cosy vibe.

The restrooms each come with individual porcelain Chinese bowl basins, each painted with intricate patterns. The counter, tap and mirror frames are covered in brass, with the mirror frame also functioning as a towel holder.

A dark red spiral staircase leads to a semi-private cocktail bar, clad in cylindrical pipe finishes in varying diameters. The upstairs dining spaces resemble vintage speakeasies for after-hour drinks. The furniture design becomes more executive, while still preserving an eclectic style, with two-seater tables and high-backed seats functioning as semi-partitions against passing traffic. C

Semi-private dining spaces for lounging

Open staircase behind a patterned metal screen

Dessert bar

PROJECT DATA

Project Name
Mr Chew's Chino Latino Bar

Location
The Penthouse, WOLO Bukit Bintang,
Jalan Bukit Bintang, Kuala Lumpur, Malaysia

Completion Date
April 2017

Gross Floor Area
740 square metres

Building Height
2 storeys

Owners
Eddie Chew; Christian Bauer

Interior Design Firm
SWOT Design Group

Creative Director
Sean Yeap

Lighting Consultant
Lightcraft Sdn Bhd

Interior Fit-Out Contractor
Jalex Sdn Bhd

Images
SWOT Design Group

SUNGAI BULOH STORY GALLERY

Sungai Buloh used to be home to the second biggest leprosy settlement in the world. While a remnant of residents remains, the settlement and its historical significance have been fading into oblivion.

Sungai Buloh Story Gallery was initiated by the Sungai Buloh Settlement Council as a place to house related artefacts and historical materials, as well as a platform for recording, storing and exhibiting the leprosy community's collective memories—which form an intangible cultural heritage.

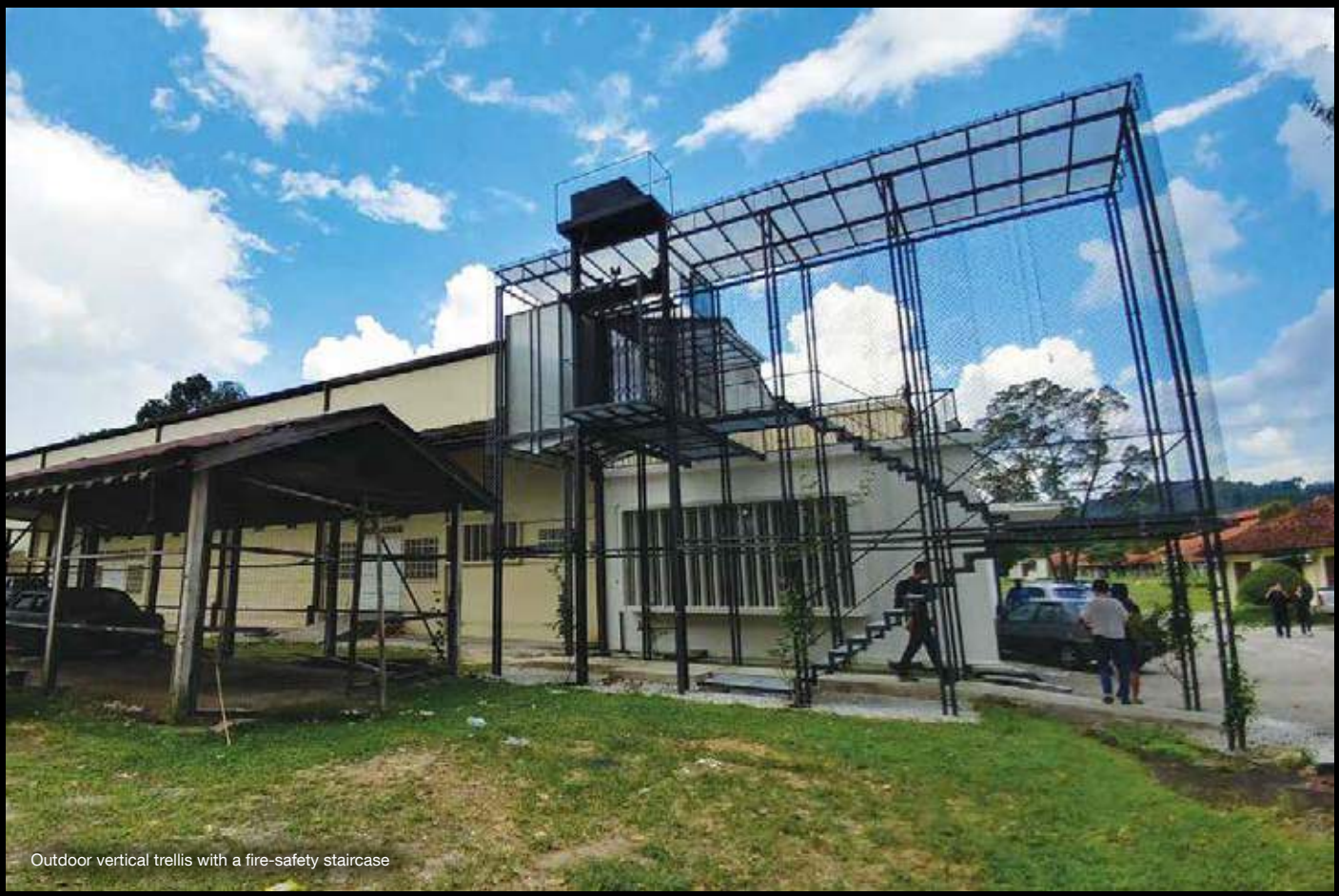
The design project was first incorporated as a design studio project at the School of Architecture & Built Environment (SABE) UCSI University in 2016. Students' designs were seen as preliminary design schemes and then further developed and finalised by professional architectural designers—such as Shin Chang and Penny Ng from MentahMatter, Ng Seksan and Wong Jeh Tat from Seksan Design, and Associate Professor Teoh Chee Keong from SABE—who served as unpaid volunteers for the project. The project raised RM700,000 via crowd-funding, and its construction was managed by Great Substance Sdn Bhd as their corporate social responsibility (CSR) project.

ADAPTIVE REUSE

The Story Gallery is located at the former people assembly hall (Dewan Orang Ramai) at the settlement, dubbed Valley of Hope, and divided into several parts—a three-storey gallery space, an outdoor vertical trellis with a fire-safety staircase, a disabled-friendly lift, a canteen-cum-library, and a 'village green' garden surrounding the building.

Considering the heritage and historical values of the existing building, the design team agreed that the new facility should adhere to the principles of heritage preservation with minimum impact to the existing structure, using reversible construction method that would allow flexibility in any space adjustment in the future.

The gallery is built of structural steel and light covering, such as polycarbonate sheets, to minimise the dead



Outdoor vertical trellis with a fire-safety staircase

Artefacts and historical materials on life in the settlement

An overview of leprosy and the settlement

Exhibiting the leprosy community's collective memories

load of the building. The design optimised the use of locally-available and sustainable materials, such as mild steel, salvaged timber, galvanised chain links etc.

This adaptive reuse project required a creative, brave and thoughtful design intervention to carefully insert new spatial elements into an existing hall, without losing the building's original function and characteristics. The newly added Story Gallery provides an additional 200 square metres of space without sacrificing the original useable floor area within the community hall.

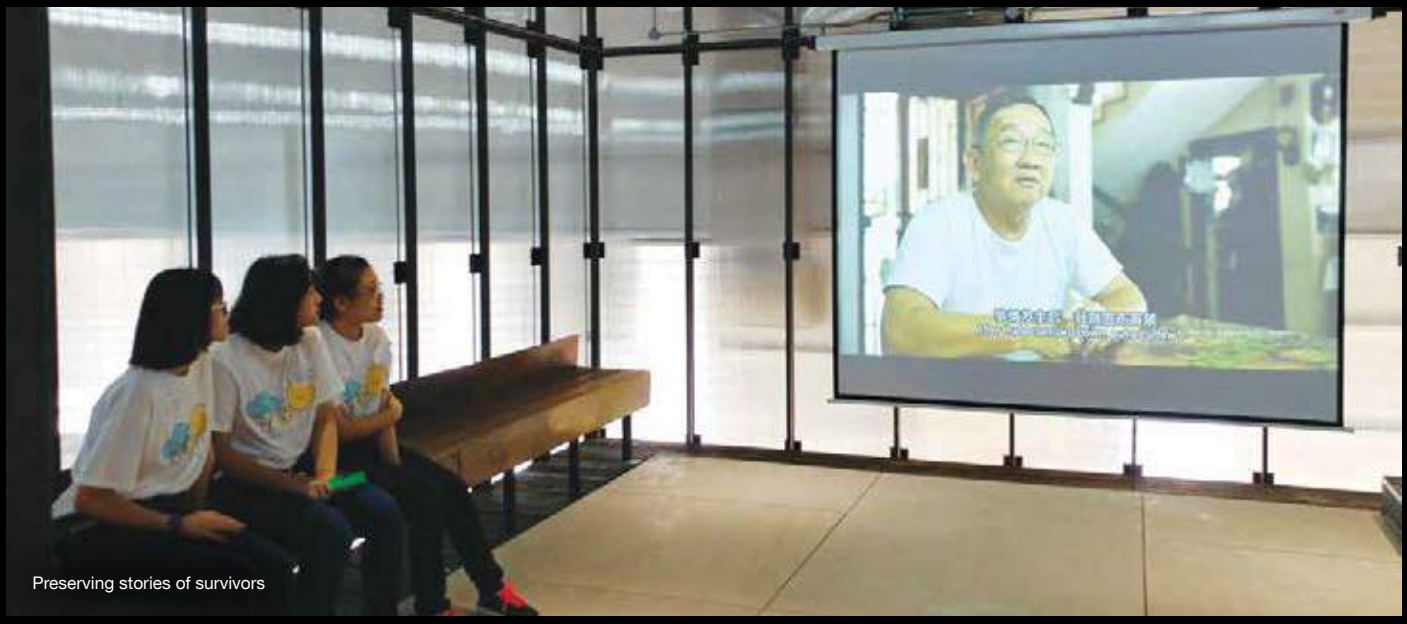
DOWN MEMORY LANE

Conceptually, the Story Gallery is designed to connect the landscape of the Valley of Hope environment with the community hall building, with a special construction along the walking path designed to bring visitors down the leprosy patients' memory lane.

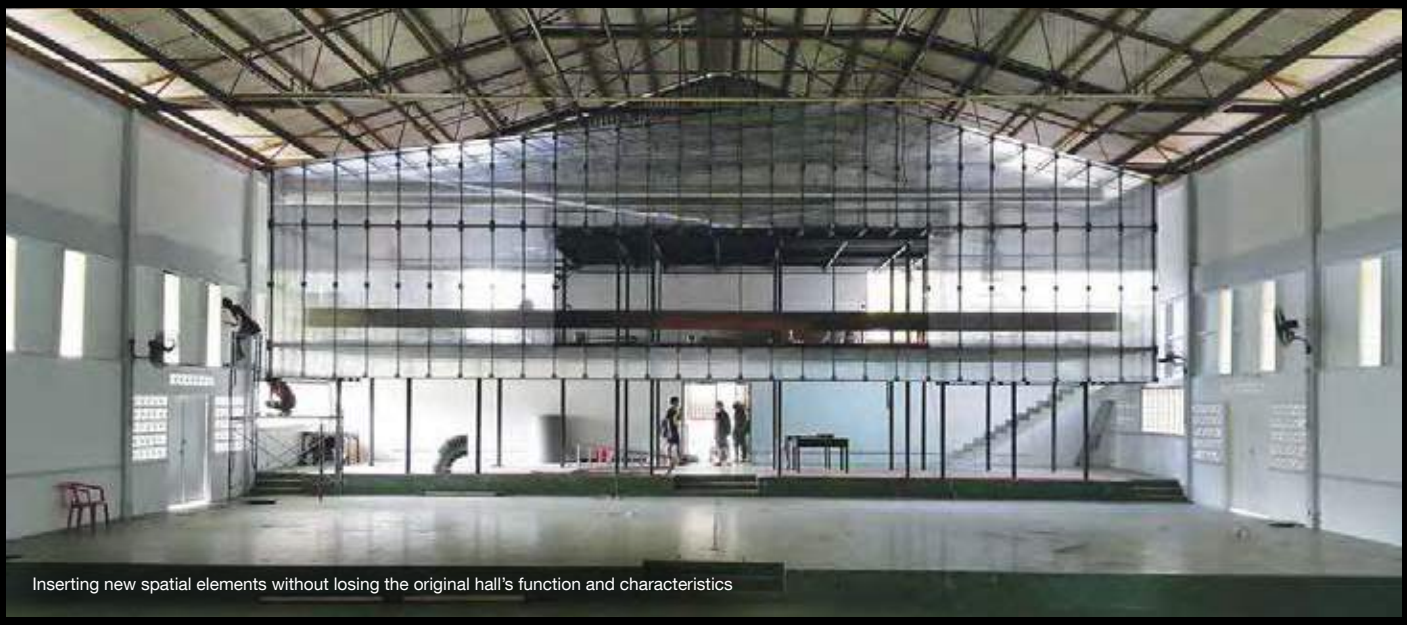
The first floor is mainly for display corridors, which leads to the second floor where the main function and activities would take place. The displays include a clear overview about leprosy and the settlement.

The second floor is divided into several sections, including an original film projector room, a main video screening area featuring stories from the survivors, an interactive section, as well as two existing semi-outdoor platforms. These spaces will showcase the settlement's oral history and the social lives of the residents in the past, giving visitors a closer look at the life and stories in the settlement.

The council hopes the project will enable the future generation to remember the settlement, which provided refuge to thousands of leprosy patients since 1930.



Preserving stories of survivors



Inserting new spatial elements without losing the original hall's function and characteristics

Designed for minimum impact to the existing structure

Outdoor vertical trellis with a fire-safety staircase

PROJECT DATA

Project Name
Sungai Buloh Story Gallery

Location
National Leprosy Control Center, Sungai Buloh, Selangor, Malaysia

Completion Date
March 2018

Site Area
2,000 square metres

Gross Floor Area
450 square metres

Building Height
3 storeys; 9 metres

Client/Owner
Sungai Buloh Leprosy Settlement Council

Architecture Firms
Collective design by:
MentahMatter Design; Seksan Design;
School of Architecture & Built Environment, UCSI University

Interior Design Firms
MentahMatter Design; LostGen Artspace

Principal Designers
Shin Chang; Wong Jeh Tat; Teoh Chee Keong

Landscape Architect
Ng Seksan

Main Contractor
Great Substance Sdn Bhd

Images
Teoh Chee Keong

Section view

EXOTIC ROOF ASIA

ForeVereaL

Our premium, synthetic thatch roof materials look incredibly like natural thatch from around the world. But in every way, we improved on nature's design.

Our artificial thatch, recreated with modern roofing materials and designed to retain its appearance for decades, offers advantages you won't find with other types of thatch. Whether you choose synthetic thatch roof material from Exotic Roof Asia you'll find that it's the best possible choice for your next project.

Why Synthetic Thatch Roofing & Synthetic Thatch Ceiling

Please visit our website www.gafroofing.com.my or www.probuild.com.my

(1129133-U)

PROBUILD VENTURE SDN.BHD.

T: 603-7880 0300 F: 603-7883 0300 Email: gaf.malaysia@gmail.com Web: www.gafroofing.com.my
9A-5, Block F, Jalan PJU1/42,
Dataran Prima, 47301 Petaling Jaya,
Selangor Darul Ehsan.

Showcase of the shower products

KOHLER EXPERIENCE CENTER SINGAPORE

Located in Singapore's downtown district and housed in a three-storey conservation shophouse on Peck Seah Street, the Experience Center is an interactive showcase for Kohler's bathroom and spa products housed under one roof. The space is deliberately revealed as a series of five semi-open 'display suites', each designed with a distinctive theme (fashion, hi-tech, family, classic and black).

The entrance of the centre is anchored by a gallery space that showcases the brand's history, interactive digital media walls, glass display cases with original castings, and special pieces re-imagined as jewellery. Light timber-panelled walls with black metal trims, plush carpeting and open ceilings give the interiors an airy yet refined atmosphere. The remaining public spaces include a live kitchen, consultation areas and flexible seating arrangements that can be adapted to suit various functions, such as meetings, events and exhibitions.

To pay homage to the architecture of the place, a key element in LTW's design philosophy, the design team integrated features such as laser-cut batik panels and Peranakan-inspired flooring tiles.

Open-plan layout showcasing different sanitary products

Furniture items were handpicked from Restoration Hardware, an American interior décor brand known for their contemporary furniture, fixtures and accessories inspired by the rustic craftsmanship period. "We felt these items were a perfect complement to the 19th century American home aesthetic that alludes to Kohler's beginnings as a company, as well as the historic nature of the building this Experience Center is located," says LTW partner Teo Su Seam.

The design team created different environments for each bathroom suite to showcase Kohler's sanitary products in a quirky way by allowing the construction of the suites to be completed in a 'pop-up' manner; these spaces have the flexibility to be updated as often as required.

The second level of the Experience Center features an open-plan layout to showcase Kohler's Sustainability and Konnect products. Two contrasting colours and textures have been used at opposite ends of the space—red to symbolise creativity; and blue to represent the mutual collaboration with sister brands, Jacob Delafon and Kallista.

Dedicated to the newest Kohler products, the third floor of the centre invites visitors to experience the range in an intimate and cosy setting.

"This was both an immersive and intensive process for us. Using a theatrical approach, we wanted to tell a story about each collection that is dramatic and multifaceted," adds Teo. "From getting to know the wide range of high-quality products from Kohler's various lines to delivering the end result in a very compressed schedule, our team was very excited to work on such a unique interior project."

Family-themed bathroom concept

A bold use of red in the display

Showcasing the company's products in a quirky and eye-catching way

PROJECT DATA

Project Name
KOHLER Experience Center Singapore

Location
52/56 Peck Seah Street,
Tanjong Pagar, Singapore

Completion Date
June 2017

Project Site Area
1,116.88 square metres

Gross Floor Area
739.85 square metres

Building Height
3 storeys; 13.29 metres

Client
Kohler Co

Interior Design Firm
LTW Designworks Pte Ltd

Principal Designer
Teo Su Seam

Lighting Consultant
LTW Designworks Pte Ltd

Interior Fit-Out Contractor
Huading & Zinta

Images
LTW Designworks Pte Ltd

Colouful graphics infuse the space with an energetic feel

'ORGANIC CELL SPACES' AT PLATFORM E

Platform E is an entire entrepreneurship ecosystem and support community. Its two-level co-working space, at the Singapore Institute of Management's Management House, consists of open desks, private suites, discussion rooms, boardroom, administrative offices and an atrium lobby.

Organic cells are the building blocks of life in any ecosystem. Hence, circular cell shapes are used extensively in the interior design. Glass walls create a sense of transparency for the whole place, while colourful graphics inject a metabolic and energetic feel, like that of an organic cell.

The previous space was used entirely differently. Thus, the whole project involved a completely new layout, with all walls being demolished, and new spaces being created.

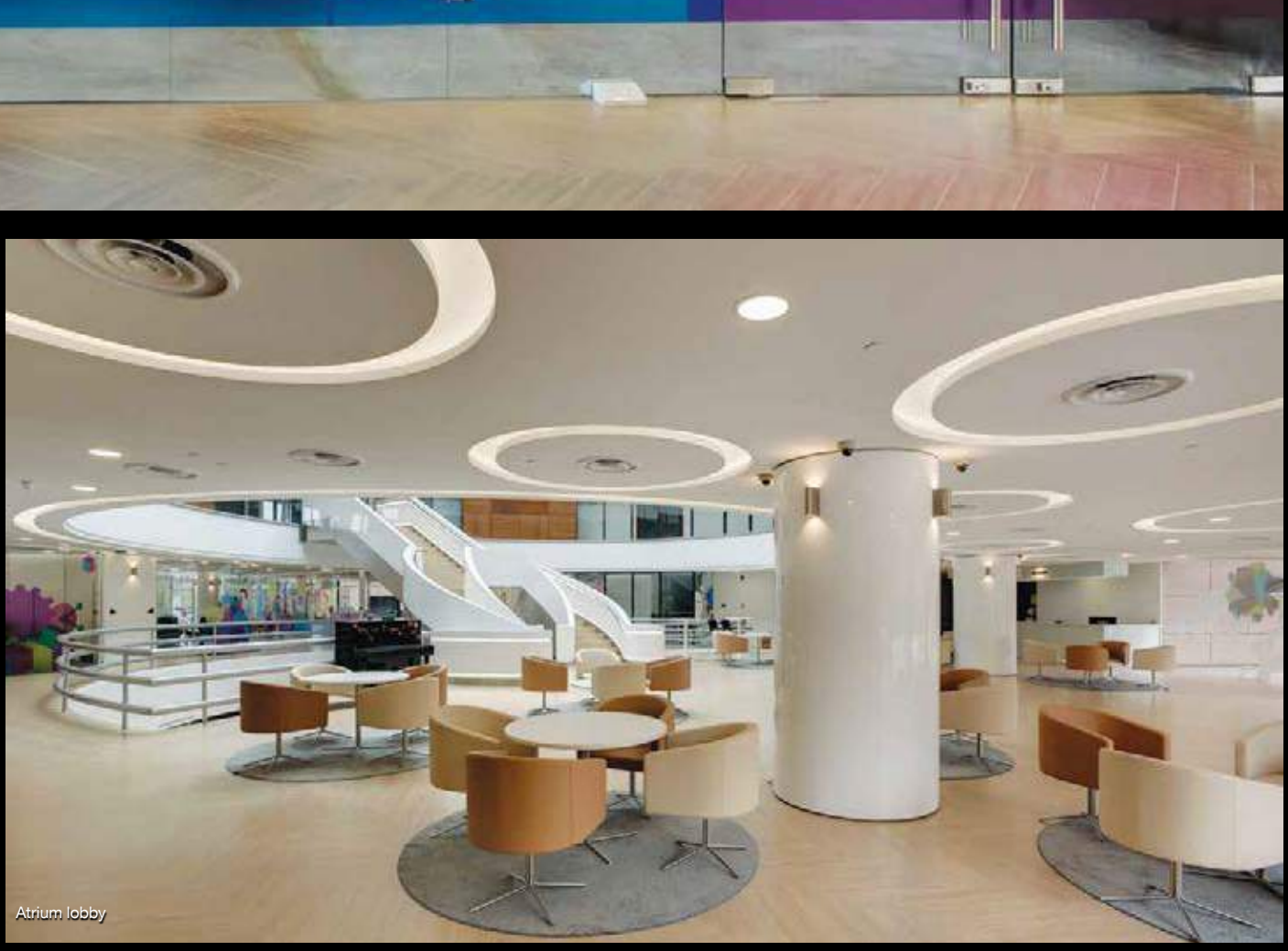
The circular-shaped discussion rooms, boardroom and co-working spaces are given strategic frontages; they flank a central corridor that leads to the open roof terrace, which allows occupants easy access for a breath of fresh air. Ancillary areas such as the administrative offices are tucked away.

The co-working space can accommodate more than 250 desks, arranged in linear form to maximise space utility. The raw cement floor and exposed ceiling create a bare energetic look and save costs. Carpets are used for floors in the boardroom and discussion rooms for better sound absorption.

The atrium lobby has been upgraded and modernised. The herringbone floor tile pattern creates a more youthful look. Counters, entrances, columns and staircases have been clad with white acrylics with accent lighting.

The circular scheme used is accentuated with glass walls, circular cove lights, tables and seats, carpets details, etc.

This project was accorded the bronze award at the Interior Design Excellence Awards 2017 for Best Workplace Design in Singapore, in the workplace over 5,001 square feet category.



Atrium lobby

The circular cell shape is used throughout the design

Co-working space

Interior of the boardroom

Transparent discussion rooms

PROJECT DATA

Project Name
'Organic Cell Spaces' at Platform E

Location
41 Namly Ave, Singapore

Completion Date
August 2017

Client
Platform E,
Singapore Institute of Management AEC Pte Ltd

Gross Floor Area
2,500 square metres

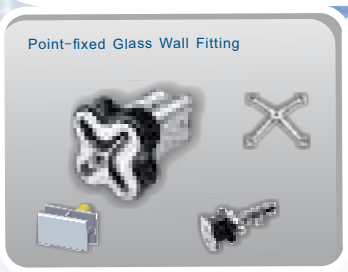
Interior Design Firm
Lim Ai Tiong (LATO) Architects/Design

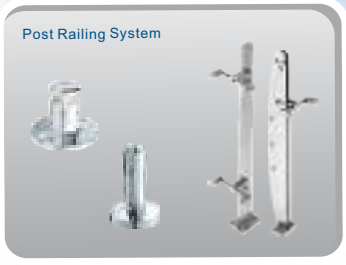
Principal Designer
Lim Ai Tiong

Images
Lim Ai Tiong (LATO) Architects/Design

KIN LONG

Construction Hardware Expert





Over 8000 employees guarantee leading technologies & services.

KIN LONG (MALAYSIA) SDN BHD
Add: A206, Block A, Kelana Square,
17, Jalan SS7/26, 47301 Petaling Jaya,
Selangor Darul'Ehsan.
Tel: +006-03-7806 3559
Fax: +006-03-7803 5449
Email: malaysia@kinlong.com

GUANGDONG KIN LONG HARDWARE PRODUCTS CO.,LTD
Add: No.3 Jianlang Rd, Daping Industrial Zone, Tangxia Town,
Dongguan City, China, 523722

www.kinlong.com

A GEOMETRIC TAKE

Geometric prints are classic and modern spins for your living spaces.
WALLCOVERING | FABRIC | CARPET | FLOORING

goodrich®
Goodrich Global
SINCE 1983


Flooring: LVT Moduleo Moods


Fabric: Isometrie Designs, Camengo


Carpet: City Maze, Ex Stock


Wallcovering: Vycon, J.Josephson

Goodrich Global Sdn Bhd (386806-P)

KUALA LUMPUR (HQ) | T : (603) 6201 5757
JOHOR BAHRU | T : (607) 3515 757
KOTA KINABALU | T : (6088) 484 357
KUCHING | T : (6082) 415 757 / 425 757

Stay Connected - www.goodrichglobal.com | info@goodrichglobal.com.my

/Goodrich.Malaysia /GoodrichGlobal /GoodrichHQ Available on the App Store

SINGAPORE QUALITY CLASS
Aon Hewitt Best Employers Singapore 2015
A trusted retailer of green interiors

Scan here for more info.

REGIONAL INTERIORS

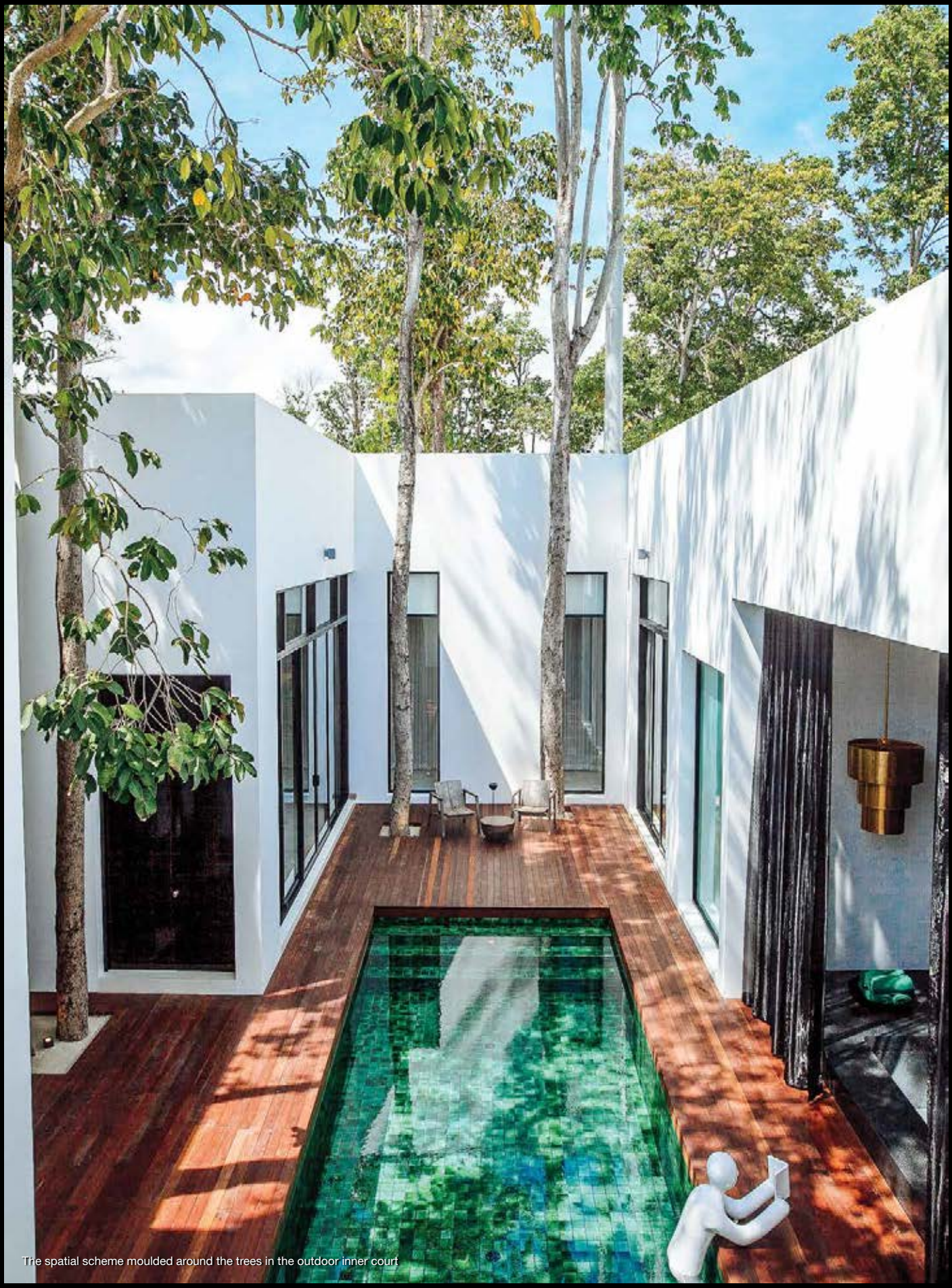
THE SECRET CHAPTERS

Designed for guests to experience both freedom and privacy, the subjective notion of conceptualising a secret place was a challenge for the design team—how does one create and define a space based on such an elusive, fluid idea? Aside from this, the second challenge was for the designers to retain the existing landscape, based on the client's wishes, with almost 100 trees scattered around the site that must be preserved. Prior to the conceptual design, the team tested several schemes of the hotel's master plan in order to tailor the architecture to fit the existing landscape while responding to the project's feasibility.

The designers expressed the 'secretive nature' of the building by 'moulding' the spatial scheme around the trees, which produced architectural clusters that blend with the surroundings and also created spaces that are open as well as hidden. These spaces unfold or open up only to those who have access, allowing for a sense of freedom in the privacy of a well-concealed spot, as laid out in the design brief.

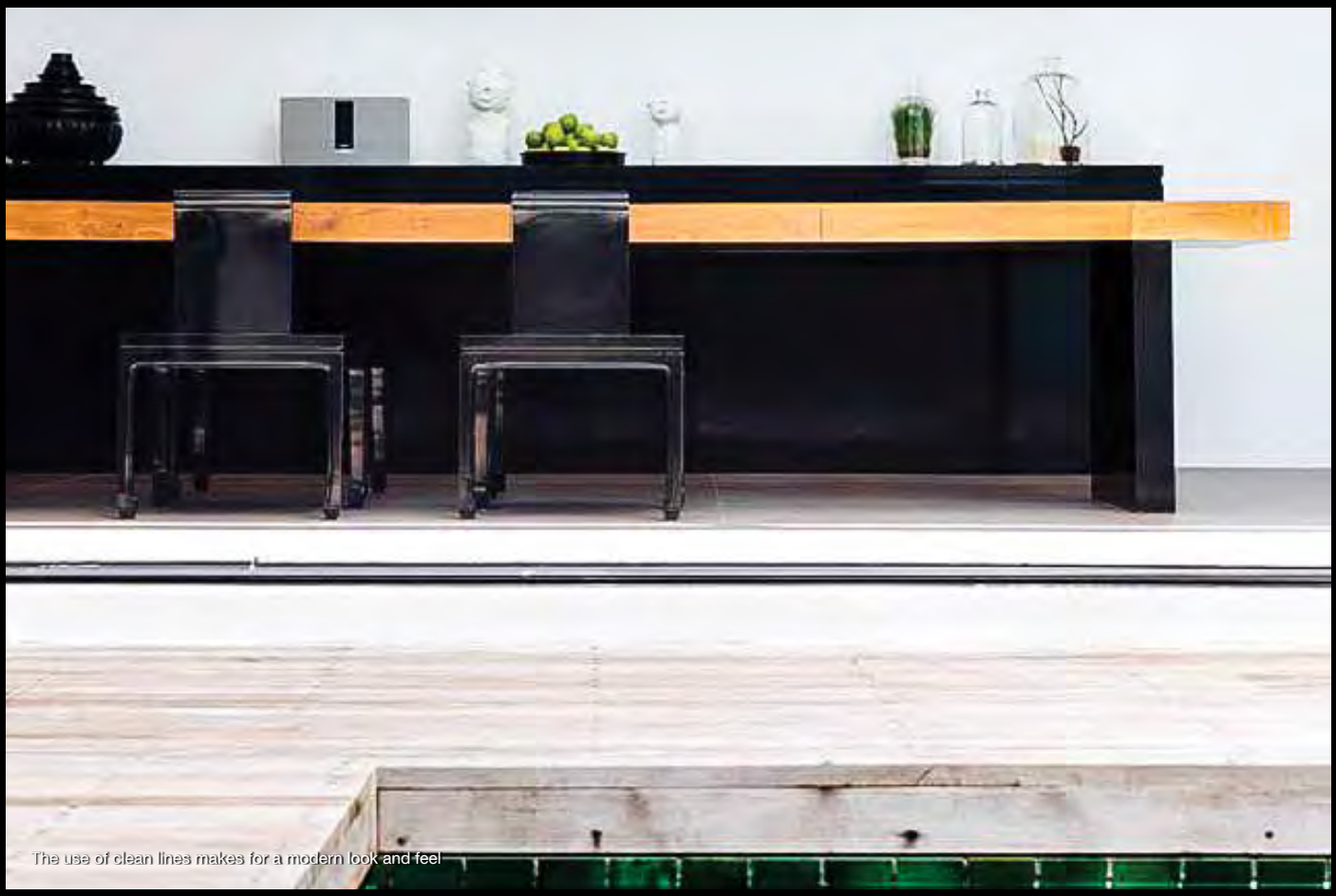
The colour palette and finishes, as well as the use of white walls, wooden decks and plenty of glass, convey a modern Asian sensibility.

White walls, wooden decks and glass convey a modern Asian sensibility



The spatial scheme moulded around the trees in the outdoor inner court

The fluid spatial layout of the dining and living areas



The use of clean lines makes for a modern look and feel

Jacuzzi

Bedroom

Working space

PROJECT DATA

Project Name
The Secret Chapters

Location
Samui Island, Surat Thani, Thailand

Completion Date
March 2018

Client/Owner
Kamoltham Co, Ltd

Gross Floor Area
5,000 square metres

Interior Design Firms
Tirawan Songsawat; G4 architects Co, Ltd

Number of Villas
20

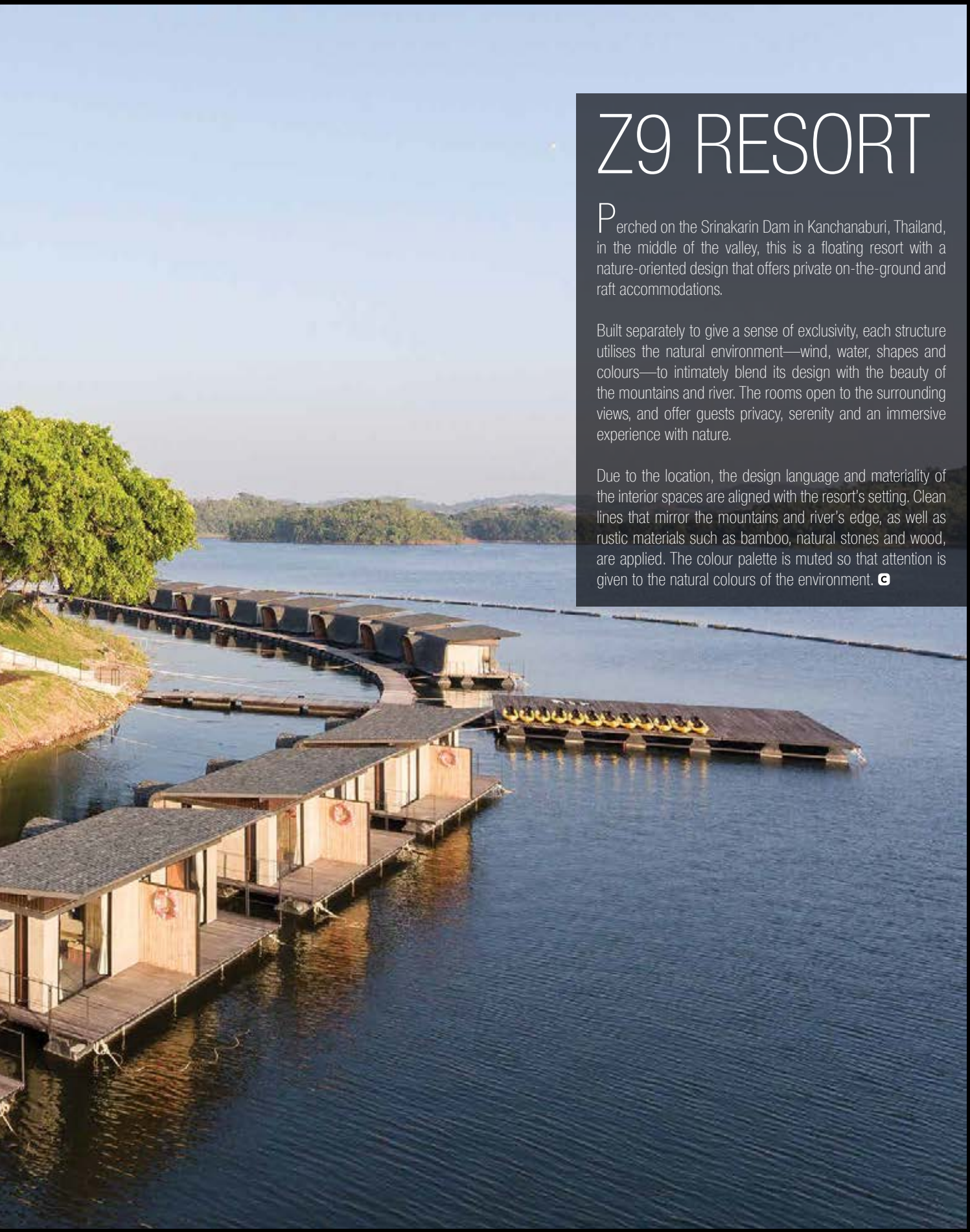
Mechanical & Electrical Engineer
ADEE Environment & Engineering Co, Ltd

Quantity Surveyor
Prachanart Nawamintr Co, Ltd (PCM)

Interior Fit-Out Contractor
Pattara Studio

Images
Kamoltham Co, Ltd; G4 architects Co, Ltd; FAT FILM Studio

Each room, built separately for exclusivity, offers guests an immersive experience with nature



Z9 RESORT

Perched on the Srinakarin Dam in Kanchanaburi, Thailand, in the middle of the valley, this is a floating resort with a nature-oriented design that offers private on-the-ground and raft accommodations.

Built separately to give a sense of exclusivity, each structure utilises the natural environment—wind, water, shapes and colours—to intimately blend its design with the beauty of the mountains and river. The rooms open to the surrounding views, and offer guests privacy, serenity and an immersive experience with nature.

Due to the location, the design language and materiality of the interior spaces are aligned with the resort's setting. Clean lines that mirror the mountains and river's edge, as well as rustic materials such as bamboo, natural stones and wood, are applied. The colour palette is muted so that attention is given to the natural colours of the environment. C

Rustic materials such as bamboo, natural stones and wood are applied

Night view of the lobby

Restaurant

Bedroom

Floating resort

PROJECT DATA

Project Name
Z9 Resort

Location
Kanchanaburi, Thailand

Completion Date
25 December 2017

Client/Owner
Chatchai Chatudomkul

Gross Floor Area
2,500 square metres

Interior Design Firm
Dersyn Studio Co, Ltd

Number of Rooms
20

Lighting Consultant
Saksit Veeramas

Electrical Engineers
Teerachote Konglomjeake;
Dersyn Studio Co, Ltd

Quantity Surveyors
Narathip Deekaew;
Dersyn Studio Co, Ltd

Properties Masters
Tawee Nawatrakulpisut;
Kunaporn Buathong

Interior Fit-Out Contractor
TEN Design and Construction Co, Ltd

Images
Beer Singnoi

-Specialized in design and wellness consultancy for hotels, condominiums, private homes, fitness clubs, universities, corporate gyms and more.

-Deliver breakthrough innovations and premium quality products for home and club.

The Weld, Lot LG-11-12, Lower Ground Floor, No. 76, Jalan Raja Chulan, 50200 Kuala Lumpur, Malaysia.

Website: **www.f1-recreation.com**
Facebook: **f1recreationmy**
Email: **info@f1-recreation.com.my**
Tel: **+603-2022 2228** I Fax: **+603-2022 2927**

Engareh Projects

Liyana Lee
Mobile: +6017-7783455
E-mail: liyana@engareh.com.my
Tel: 603-7846 2828
Fax: 603-7734 7145

Lot 7872 Mukim Bukit Raja, Bukit Cherakah
40000 Subang New Village, Selangor, Malaysia
(Nearby Monterez Golf Club)

Engareh, being the Stone Specialist emphasize always on its best service including competitive pricing,selection of stones for their projects and having the best interest of the clients at all times.

MONIER® REFLECTIVE INSULATION SOLUTION

Creating a cooler and more comfortable living environment.

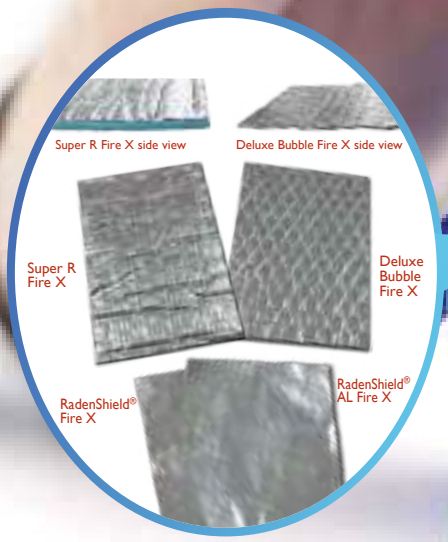
MONIER

COMFORT

ENERGY & COST SAVING

100% Leak-Proof

Officially Tested & Proven



The role of Construction Industry Development Board (CIDB) is defined in CIDB Act 520 (Amendment 2011) which extends CIBD's function as an enforcement authority on construction product quality. The CIDB Act includes the mandatory use of SIRIM certified and CIDB registered fire retardant insulation foil material in all Malaysian construction starting December 2016.

Certified Class "O" by Malaysia Fire and Rescue Department (BOMBA) in compliance with **BS476 Part 6:1989** and **BS476 Part 7:1997.** Up to 97% reflectivity with additional fire retardance.

CERTIFIED

CERTIFIED WITH CIDB ACT 520/MS 2095:2014

The Best Brands in Roof Systems by The BrandLaureate Awards for 6 Consecutive Years 2008, 2009 2010, 2011, 2012 and 2015

Recognized for our CSR efforts, Monier was honoured with the Asia Responsible Entrepreneur Award 2011

Member of the Malaysia Green Building Confederation

QUALITY SYSTEM
SIRIM
CERTIFIED WITH MS ISO 9001:2008
Registration No :AR 1050

Scan QR Code for Showroom & Sales office location

Also Available at: App Store, Google play

MONIER MALAYSIA SDN. BHD. (19163-M)
Suite 12W, 12th Floor, Wisma Sime Darby, Jalan Raja Laut, 50350 Kuala Lumpur. Malaysia. T : (+60) (3) 2176 0600 F : (+60) (3) 2604 0335

Toll Free 1800 88 0865 roofing-malaysia@monier.com www.monier.com.my

MORE POWER TO YOUR ROOF

Part of BRAAS MONIER BUILDING GROUP

REGIONAL INTERIORS

VITTORIO BY AP

Vittorio is a 28-storey luxury condominium located in the heart of Bangkok on Sukhumvit, Soi 39. The client's brief was for a modern 'vertical palazzo' inspired by the Renaissance art and architecture of Florence, with a focus on three main concepts: exquisite building design; high-quality materials and craftsmanship; and privacy for residents. The challenge of this project was to design a lush residence with privacy and sophistication, for the occupants to feel as if they are living in a masterpiece.

SPECIFIC SOLUTIONS

High ceilings inspired by the Uffizi Gallery and a modern classic theme were chosen to reflect refined quality, sophistication and a sense of sanctuary. Entering the building, residents are welcomed by a reception area that opens into a lobby, accessible only by access card for security and privacy. In keeping with the gallery theme, a carefully curated collection of sculptures and paintings by renowned local artists are showcased in a 6-metre-high room, lined with high-quality Palissandro Bluette Italian marble stone and wood.

Fixtures and fittings of exceptional craftsmanship were chosen to meet the client's expectation of timeless five-star lavishness. Patterned glass etched with gold finishes not only camouflages the TV in the master bedroom, but also adds an elegant design element. Through meticulous planning of separated walls and private lift access for discretion and ventilation, privacy was accomplished. In addition, each residence was thoughtfully designed to maximise the available space to ensure a sophisticated quality of life.

All the elements of dwp's design for the show suites and public areas, from the reception and sky lounge to the pool and gym, reflect an extraordinary quality of life. Paintings by prominent Thai artists and sculptures accessorise the public spaces and offer an ambience of opulence. Vertiginous ceilings and towering floor-to-ceiling windows allow space and light to 'flow over' the residents. Modern yet classic chandeliers, reminiscent of a starry sky, are, in themselves, works of art.

Carefully curated artworks create a refined space

Vertiginous ceilings and modern chandeliers for an ambience of opulence

Luxury accommodation with a view

Carefully curated interior finishes and furniture

Each residence was designed to maximise the available space

Plenty of natural light help create a sense of openness

Panoramic cityscape view from the gym

PROJECT DATA

Project Name
Vittorio by AP

Location
Bangkok, Thailand

Completion Date
1 July 2017

Client/Developer
AP (Thailand) PCL

Gross Floor Area
15,685 square metres

Interior Design Firm
dwp

Number of Units
88

Mechanical & Electrical Engineer
Pass Engineering Consultant Co, Ltd

Interior Fit-Out Contractor
Task Interior Co, Ltd

Images/Photos
AP (Thailand) PCL

The display stands for OOKBEE's products and the bee hive-patterned screen draw reference from the company's logo

OOKBEE HEAD OFFICE

Digital lifestyle platform OOKBEE works with many different players in the content industry, from freelance writers to the big publishers in Thailand and the region.

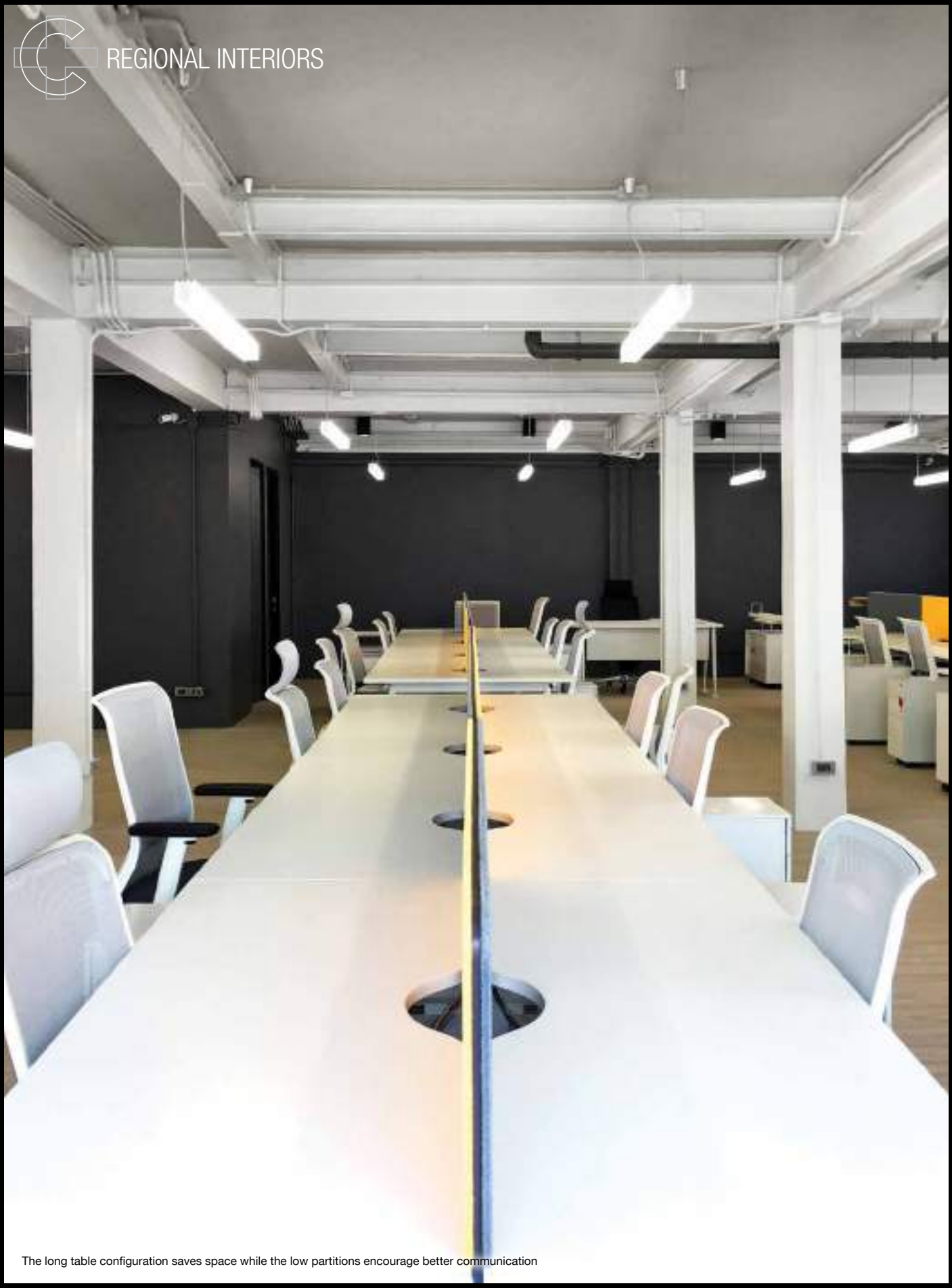
As the company's business was growing rapidly, it needed more space to accommodate its team. Hence, the company rented four units of old five-storey townhouses—which used to house a tire factory—located next to the main street in Bangkok's business district.

The designers decided to create the physical space by drawing reference from the company's logo and corporate identity. This led to a strong hexagonal imagery for the interior space, from the colours and the bee hive-patterned screen at the main entrance to the stools and the patterns on the glass partitions. The designers also allocated a rooftop garden with an open-air canteen to bring nature into the workplace. Materials were sourced locally and easily available.

The office space was mainly designed to cater to the new generation of employees, with the large recreational area, free food and drinks at the rooftop canteen, music and sports corner, etc. These are features that would help satisfy the need for a less corporate and more lifestyle-driven type of working environment.

Reception counter and waiting area

Lounge meeting area



The long table configuration saves space while the low partitions encourage better communication

Yellow is the unifying colour theme to reflect the company's corporate identity

The mezzanine with corridor leading to the meeting rooms

Recreation area and staff canteen

PROJECT DATA

Project Name
OOKBEE Head Office

Location
Pattanakarn 24, Bangkok, Thailand

Completion Date
July 2017

Site Area
316.6 square metres

Gross Floor Area
1,650 square metres

Building Height
18 metres

Client/Owner
OOKBEE Co, Ltd

Interior Design Firm
10. Design

Interior Fit-Out Contractor
10. Design

Mechanical & Electrical Engineer
N Engineering Service Co, Ltd

Civil & Structural Engineer
N Engineering Service Co, Ltd

Main Contractor
PKT Co, Ltd

Images
10. Pictures (Krissada Sillapachai)

Choosing the right tile adhesive

Bostik offers tile adhesives and grouts for professional tilers, specifiers and architects, as well as DIYers. The product range covers variants intended for ceramic, porcelain, natural stone and glass tile installations.

The cement based tile adhesive technology that developed by Bostik include variants which not only provide excellent adhesion on wall and floor installations, but also in application areas subjected to water and heat exposure, vibrations and heavy traffic.

Choosing the right tile adhesive include consideration of whether the tile will be applied inside or outside, to the wall or the floor, in a wet or dry area, among other issues. It is also important to reflect on the kind of setting bed to be used: drywall, concrete or plywood as well as the type and size of tiles selected.

Open Time

Pull off test at site becomes common for suppliers to prove the bond strength of the tile adhesive meets the standard. However in most cases `Open-Time' have been overlooked. With reference to EN 12004 & MS ISO 13007-1, Open Time is defined as the maximum interval, after application of the adhesive, at which tiles can be embedded onto the applied adhesive and still meet the specified tensile adhesion strength requirement. Indeed, `Open Time' have a significant impact on the tiling system. When the tiles were laid on the substrastre after Open-Time lapsed , a significant drop of the bond strength could be observed for all formulations.

Starting from your next project, request pull-off test with extended open time to find out the specific quality of the tile adhesive used.

BOSTIK HOTLINE

Smart help
+606 678 9788

Bostik Findley (Malaysia) Sdn. Bhd. (286152V)
Lot 112 & 113, Kawasan Perindustrian Senawang,
70450 Seremban, Negeri Sembilan, Malaysia
Tel : +606 678 9788 Fax : +606 678 9766

www.bostik.com
an Arkema company

Your local partner in Malaysia

In order to be able to react quickly and competently to questions and requirements in the area of parking space management, SKIDATA strengthen its presence in the ASEAN region with its subsidiary in Kuala Lumpur. The local SKIDATA Experts together with our partner network are available for consulting, sales, project management, installations and professional after sales services.


Office SKIDATA Malaysia

An award winning product for award winning projects

SKIDATA with over 100 registered patents and a winner of international innovation prices, has equipped lately in Malaysia award winning condominiums (e.g. The Troika), state to the art shopping centres (e.g. Capital Square), office buildings (e.g. JKG-Tower) as well as international Airports (e.g. Penang).

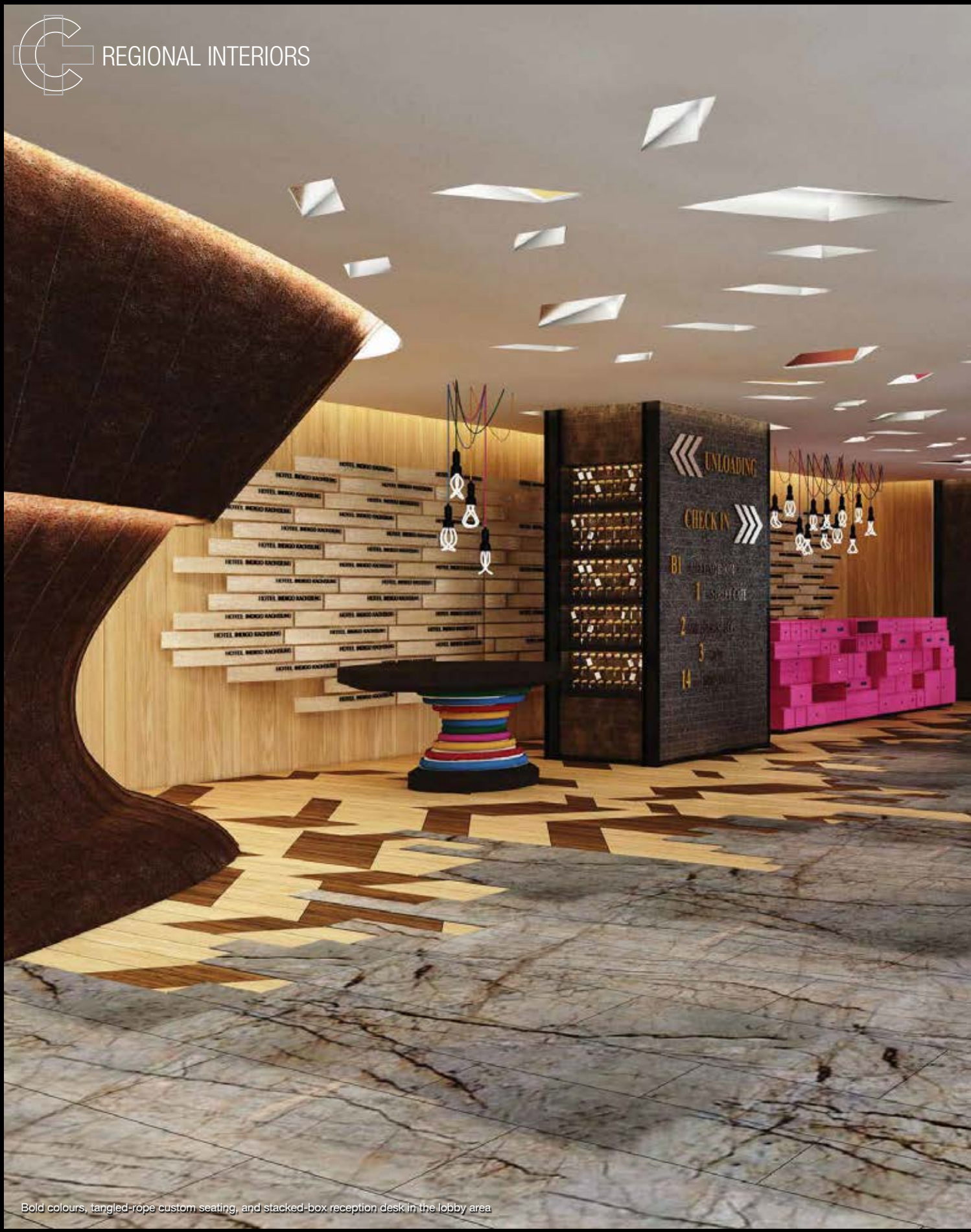
Maximize the parking revenue with a reliable system

SKIDATA as worldwide market leader for Car Access and Parking Management System provides a most reliable parking equipment that commits 96% to 98% runtime without failure, if a professional SKIDATA maintenance services is conducted. That directly allows the customer to maximize his collection revenue and ROI. Mostly the higher investment costs for this high end product is amortised within one to two years, due to maximisation of daily revenue and professional monitoring.

No less important, the users are satisfied with a dependable and convenient parking system, which always leaves them the first and last impression when visiting a shopping centre, hotel or public building.

SKIDATA Malaysia Sdn Bhd
Technology Park Malaysia • Lot 2-3, Enterprise 2
Lebuhraya Puchong – Sg Besi, Bukit Jalil
57000 Kuala Lumpur, MALAYSIA
www.skidata.my

SKIDATA®
KUDELSKI GROUP



Bold colours, tangled-rope custom seating, and stacked-box reception desk in the lobby area

INDIGO HOTEL KAOHSIUNG CENTRAL PARK

This project aims to redefine the whole idea of a five-star hotel experience, shifting the notion of luxury as it is commonly known. The main objective is to connect with the neighbourhood, allowing the hotel to become a part of the energetic urban fabric, and distinguishing itself from other five-star hotels.

As such, Kaohsiung and its dynamic port becomes the central inspiration for the hotel's interiors, as the property is located near the commercial harbour. The concept captures the journey of goods from the harbour to the shelves of Kaohsiung's boutiques and emporiums, a nod to the hotel site's history as a shopping mall.

SOMETHING NEW FROM SOMETHING OLD

The challenge was to create a hotel with a strong identity that flows seamlessly from the lobby and reception to the other spaces. Layers of bright colours and textures are used to create a lively space. Because there is more than one main entrance, the service counter is strategically located to act as a backdrop for all points of entry, making it easily recognisable to guests.

Bold blue and orange colours in the custom headboard artwork depict luxury watchbands woven together

Another challenge was the architecture itself—the building was a mixed-use shopping arcade and office building, with low ceilings, limited solar access and an irregular structure, forcing the designers to design each and every one of the 129 rooms as an individual exercise. This had to be balanced with the practical necessity of standardising the room design. The solution came again by observing the architectural context and adhering to the nature of the building by using retail design principles. Rather than aiming at standardising the whole room, the designers broke down the room into decorative and functional units that are recomposed in each layout to suit the irregularities of the architecture. As a result, each room gives guests a distinct experience.

The lower basement, with its low ceilings and lack of natural sunlight, is transformed using container-like structures to create an almost shipyard-like space that fits well with the theme. Meeting rooms are placed here for a more intimate setting.

REALISING THE DESIGN CONCEPT

Upon entering the hotel, guests will notice hints of its past retail life with the bold colours and excitement of Taiwanese arcades. Elements of life in the harbour, such as custom seating that resembles tangled purple ropes and a reception desk made out of bright pink stacked boxes, sets an industrial ambience.

The 129 guest rooms are filled with bright colours and feature a full headboard wall of vintage soda crates. Again, amenities are placed on shelves resembling boutiques in the neighbourhood, allowing guests to 'shop' for the items they want. The brilliant blue-tiled walls and floor-to-ceiling windows of the bathrooms that look out towards the harbour take their cue from the ocean. The port hole-inspired mirror and luggage-like seating at the vanity desk add the finishing touches to the theme.

Executive suite living area

The building's irregular structure was an opportunity to explore new design solutions

Corridor

Shipyard-like basement café

The suites are again inspired by the idea of luxury shops—the final destination of goods that arrive at the harbour. Bold blue and orange colours are used in the custom headboard artwork, meant to remind guests of luxury watchbands woven together. On the adjacent wall, large clock hands turn an otherwise blank space into a grand timepiece.

Versatile custom-designed UV graphic prints—designed by HBA and printed locally in Taiwan—are used as a bright and bold backdrop to achieve the look and feel of an emporium in the guest rooms. Because of its versatility of application, the UV prints are used on various surfaces, including headboards, cabinet doors, fabric and wall covering, creating an all-encompassing look.

The flooring material is a customised mix of reconstituted stone and stone fragments to create the look of terrazzo flooring, a commonly used material in Taiwanese traditional architecture, but more durable for hotels' high traffic use. The elongated hexagonal blue tiles in the guest bathrooms are reminiscent of the hotel's brand colour.

Metal is predominantly featured in the interiors. From the hull in the lobby to the metal sheets at the guest room doors, all metal is locally sourced and purposely untreated so that it will age with the building. The patina created over time will add character to the hotel while creating a different experience for guests.

Dining areas resemble open-air markets, with fresh produce, cheeses and breads on display, and communal seating areas. Items for sale are positioned on shelves in custom packaging designed by the graphics team. The harbour staff canteen, with chains and ropes and suspended weights similar to the bustling area, inspired the basement café.

In a world increasingly congested with fussy designs, this project demonstrates a new type of luxury with a refreshing perspective, celebrating the Kaohsiung harbour and all of the creative energies of the commercial surroundings. C

The ocean-inspired blue-tiled bathrooms with a harbour view

PROJECT DATA

Project Name
Hotel Indigo Kaohsiung Central Park

Location
4, Zhongshan 1st Road, Xinxing District, Kaohsiung City, Taiwan

Completion Date
April 2017

Building Height
14 storeys

Number of Rooms
129 rooms

Owner
Royal Seasons Hotel Group

Hotel Operator
Hotel Indigo

Hotel Branding & Design
VOCUIS Branding & Design

Architecture Firm
Architect Shen & Associates

Project Architect
Congren Shen

Interior Design Firm
Hirsch Bedner Associates (HBA)

Principal Designers
Federico Masin; Shichao; Durian Lau; Eva Lam

Civil & Structural Engineer
WSP

Mechanical & Electrical Engineer
Home Run Electrical Engineers Associate

Lighting Consultant
TinoKwan Lighting Consultant Ltd

Interior Fit-Out Contractor
Immortal Triumph Industrial, Taiwan

Images
HBA

ALESCO **KANSAI PAINT**

Together, We Paint
A More Beautiful
World

YOUR 360° PAINT AND COATING PARTNER

KANSAI PAINT ASIA PACIFIC SDN. BHD.(705919-W) (formerly known as Kansai Coatings Malaysia Sdn. Bhd.)

Factory
4, Solok Waja 2, Kawasan Perindustrian Bukit Raja, P.O. Box 159, 41710 Klang, Selangor Darul Ehsan, Malaysia.
T +60(3) 3362 2388 I F +60(3) 3342 7223

Sales & Marketing Office
9-1 & 9-2, Level 9, Port Tech Tower, Jalan Tiara 3/KU1, Bandar Baru Klang, 41150 Klang, Selangor Darul Ehsan, Malaysia.
T +60(3) 3002 4001 I F +60(3) 3002 4002

www.kansaimalaysia.com I Kansai Paint Asia Pacific I professional@kansaimalaysia.com

KEXTRA
Always go for Extra

fb.com/khpsteel
kextra.khp
www.kextra.com.my
info@kextra.com.my
HQ : +607 485 8896
KL : +603 5879 8080

The Roofing Experts

Established in November 2000, Kextra first started in humble surroundings as a registered company set up in Batu Pahat, Johor. Backed by an unwavering commitment to Quality and Assurance and Customer Satisfaction, Kextra has over the years forged a name for itself as one of the industry's most trusted names. Today, we have grown significantly to become a leading manufacturer of steel products, with a key expertise in steel roofing materials.

Metal Roofing · Purlin · Truss · Coil

STEEL SUPPLIED BY BLUESCOPE

MALAYSIA

THREE33 RESIDENCES

A transit-oriented development with a 23-storey block of 333 serviced apartments close to Jalan Kepong

Image courtesy of TSI Domain Sdn Bhd

CAMELIA RESIDENCES

This development in Tebrau, Johor, comprises two 19-storey blocks with 300 apartments on a single-storey carpark podium

KUALA TERENGGANU CITY CENTRE (KTCC)

An integrated project, at the Heritage Waterfront City, with comprises a 2.5 million-square-feet shopping mall, a five-star hotel, and two towers with business suites

Image courtesy of YTT Architect

PROJECT TITLE	PROJECT TYPE	LOCATION	DEVELOPER/OWNER	ARCHITECT/ CONSULTANT	CONSTRUCTION START	PROJECT VALUE (RM 'MILLION)
Three33 Residence	Apartments	Kuala Lumpur	TSI Domain Sdn Bhd	A & A Architects	March 2018	100*
Camelia Residences	Apartments	Johor Bahru	UM Land	RDC Arkitek	August 2018*	70*
ISOLA KLCC	Serviced apartments	Jalan Yap Kwang Seng, Kuala Lumpur	OCR Development Sdn Bhd	Unit One Design Sdn Bhd	3Q 2018	200*
Pavilion Embassy	Serviced apartments; offices	Jalan Ampang, Kuala Lumpur	Pedoman Ikhtisas Sdn Bhd	Atelier ADT Akitek; Greenscapes; Pintar Jaya	3Q 2018	600*
Kek Lok Si Medical Centre	Hospital	Penang	Kek Lok Si Temple	Johnny Ooi Architect	March 2018	50
PD International Maritime Gateway	Shopping centre; clubhouse	Port Dickson, Negeri Sembilan	Maritime International Gateway Sdn Bhd	Zon Design Rekabina (ZDR)	4Q 2018	350*
Kuala Terengganu City Centre (KTCC)	Shopping centre; hotel	Kuala Terengganu	KTCC Mall Sdn Bhd	YTT Architect	4Q 2018	1,000*
Labuan Water Theme Park & Resort	Theme park; shopping centre; serviced apartments	Labuan	Growball Development	Arkitek Allan Wong Sdn Bhd	4Q 2019*	120*
Mangrove Langkawi	Resort	Bukit Wang Temoyong, Langkawi	Binavv Darulaman Bhd	C'Arch Architecture & Design Sdn Bhd	1Q 2019	100*

**estimate* *Source: BCI Asia Research*

SINGAPORE

GRANGE 120

A redeveloped freehold 17-storey condominium at the heart of the Orchard District with 56 units

HARBOUR VIEW GARDENS

A low-density freehold condominium with 57 units, close to two MRT stations at Pasir Panjang

Images courtesy of Roxy-Pacific Holdings

PROJECT TITLE	PROJECT TYPE	LOCATION	DEVELOPER/OWNER	ARCHITECT/ CONSULTANT	CONSTRUCTION START	PROJECT VALUE (SGD 'MILLION)
120 Grange	Residential	120 Grange Road	Roxy-Pacific Holdings Ltd	ONG&ONG Pte Ltd	May 2018	unavailable
Harbour View Gardens	Residential	213A Pasir Panjang Road	Roxy-Pacific Holdings Ltd	JGP Architecture (S) Pte Ltd	2Q 2018	unavailable
Jade Scape	Residential	314 Shunfu Road, Bishan	QingJian Realty Pte Ltd	ONG&ONG Pte Ltd	2Q 2018	400
Potong Pasir Condo (Former Raintree Gardens)	Residential	Potong Pasir Ave 1 (D13)	UVD (Projects) Pte Ltd	WOHA Architects Pte Ltd	May 2018	136.80
New Punggol Way Primary School	Education	Punggol Site 26	Ministry of Education	Interconsultants Pte Ltd	May 2018	50
Anglo Chinese School redevelopment	Education	Barker Road	Ministry of Education	ONG&ONG Pte Ltd	May 2018	15
Civil Aviation Authority CAA Warehouse	Industrial	Aviation Park Road/ Tanah Merah Coast Road	Civil Aviation Authority of Singapore	Design Link Architects Pte Ltd	May 2018	26.8
Polder Areas	Infrastructure	Pulau Tekong (Areas A & C)	Housing and Development Board	Surbana Jurong Consultants Pte Ltd	May 2018	1,230
Pan Asian Flow Factory	Industrial	Plot 24, Tuas South Link 3	Pan Asian Flow T echnology Pte Ltd	AJ+J Architecture Pte Ltd	May 2018	10

Source: BCI Asia Research

Vertical timber cladding blends the house with its surroundings

STAKING HOUSE ON SLOPE

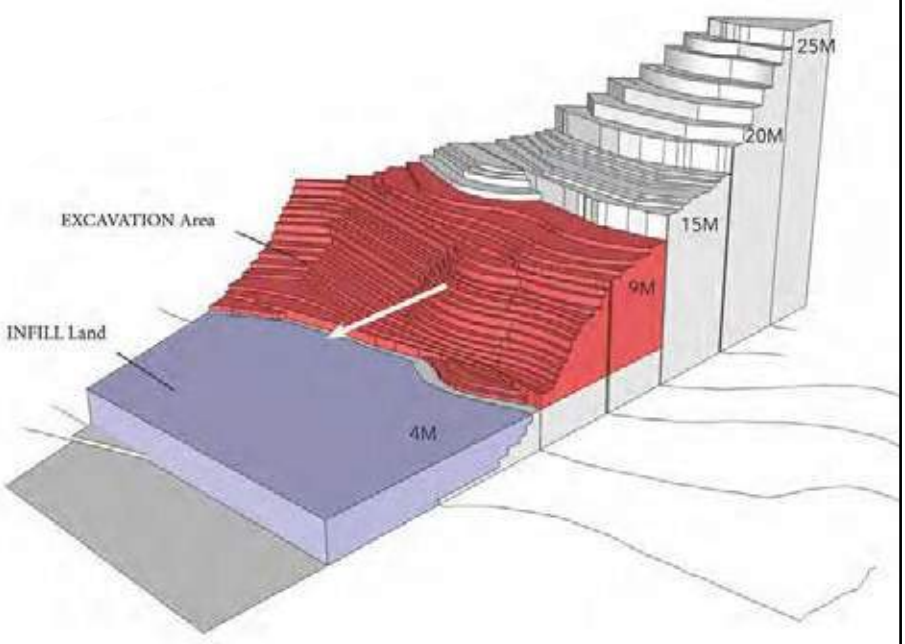
Situated on the slopes of Ipoh's Meru Golf Valley Resort, this private residence has been designed to gracefully complement the surrounding natural environment.

The architect drew inspiration from the mountain's geology to create a sophisticated yet intimate topology solution for the client. Long projecting floors mimic rock gradients, the vertical timber cladding blends with the surrounding rainforest, while the stepped floors harmonise with the neighbouring cliffs.

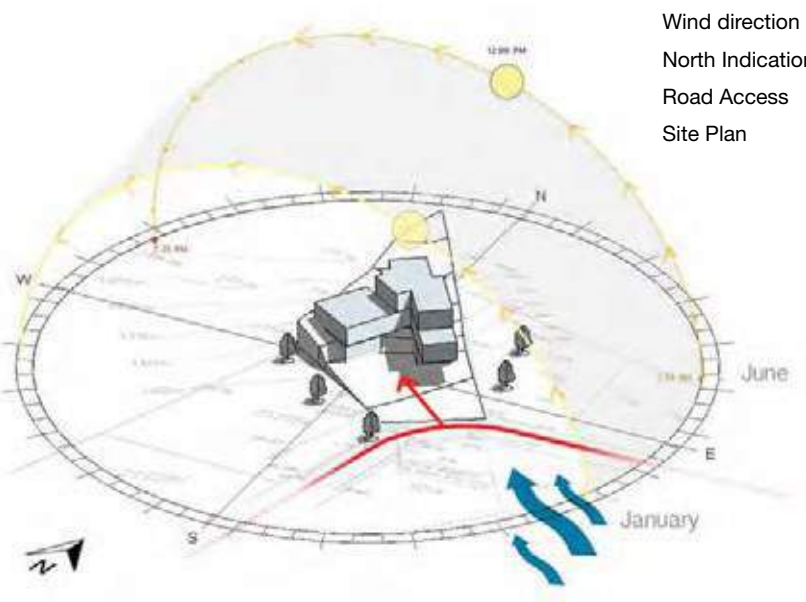
Balancing accessibility with the hill's complex contours was achieved by raising the base level a metre higher than road level, allowing cars easier passage to the residence's main entrance.

The pool on the first floor

The house is designed to blend with surrounding cliffs



Excavation diagram



The residence's orientation maximises solar shading

The mezzanine has been left open to allow the flow of cool breezes across the room. By doing so, the underpinning concrete retaining wall could be reduced in size, minimising construction costs.

A short stroll from the first floor leads to a pool area overlooked by forested hill slopes. To avoid extensive infilling and foundation works, the architect opted to support the pool on piles.

Energy efficiency is another standout feature of this design. The residence's orientation maximises solar shading as the sun's daily passage casts shadows on opposing walls. A double-layered roof structure also prevents overheating.

The choice of materials such as wood and architectural concrete results in highly sustainable construction, which is in line with the design belief that environmentally responsible design inspires creative solutions. C

PROJECT DATA

Project Name
Staking House on Slope

Location
Meru Golf Valley Resort,
Jelapang, Perak, Malaysia

Site Area
1,778 square metres

Gross Floor Area
858.95 square metres

Building Height
4 storeys; 14 metres

Client
Mr Fam

Architecture Firm
Kuee Architect

Principal Architect
Ar Shyuan Kuee

Civil & Structural Engineer
FC Ng Perunding

Construction Start
December 2018

Scheduled Completion Date
December 2019

Images
Kuee Architect

Market Village

PUNGGOL DIGITAL DISTRICT

Punggol Digital District (PDD) is envisioned to be Singapore's first district to adopt an integrated master plan approach, where a business park and university are co-located to enable technology and social innovations to flourish. Technological platforms would be incorporated from the start to meet the needs of digital industries that will help drive wider transformation efforts for the local economy. Such a holistic planning approach seeks to create an inclusive district.

PDD will house key growth sectors of the digital economy, such as cyber security and Internet of Things (IoT), bringing approximately 28,000 jobs closer to residents in the Punggol and the northeast region.

As a greenfield site, the district has the flexibility to incorporate industry needs into the core of its design and allow for integration between industry and academia. The co-location and integration of the Singapore Institute of Technology's (SIT) new campus with JTC Corporation's (JTC) business park buildings will facilitate greater industry–academia collaboration, through the cross fertilisation of ideas and knowledge among students, faculty and

Aerial view of Punggol Digital District

professionals. New technological or business ideas conceived in SIT could be tested and adopted by businesses in PDD, contributing to a higher rate of commercial success. Likewise, creative enterprises affiliated with SIT's strengths in applied programmes, such as digital and cyber security, engineering, food technology (R&D), design and specialised businesses, can also tap into SIT's research capabilities for R&D and student pool for talent.

The existing greenfield site is a forested area with lush greenery and mature trees. In order to preserve the rustic identity of Punggol and to allow the community to enjoy the greenery, the designers have identified these as 'heritage trees' to be conserved. Another initiative that has been undertaken is to ensure that any greenery that is removed to make way for new infrastructure will be replaced elsewhere within PDD. The existing Punggol Road will also be transformed into a pedestrianised heritage trail—a 1.3-kilometre green link for the community to stroll or cycle from Punggol Waterway Park to Punggol Promenade Park Connector. In addition, there will be green spaces within the SIT campus equivalent to 10 football fields of shared parks for the community to enjoy.

PDD also plans to have a distinctive green identity with urban and architectural designs, seamless connectivity within the district, as well as porous connections to the existing residential estates and developments in the vicinity. The urban design of the district will leverage the existing and future green and blue assets in Punggol, such as designing green links to the waterfront, as well as creating public spaces for the community to gather and enjoy along the waterfront. PDD is also located beside the Serangoon Reservoir, and this allows the designers to plan more community spaces that will offer retail and dining options for the community to relax and unwind by the coast.

The district is designed to be 'car-lite', with an environment that is connected, walkable and friendly to personal mobility devices (PMD) so that the community can walk, cycle, scoot, or perhaps take a driverless shuttle to their daily destinations.

Sited near the existing and upcoming Punggol residential areas, the community will be able to inject greater vibrancy into the business estate and ensure that the amenities are well utilised after office hours and over the weekends. Similarly, this higher demand for community spaces and amenities (such as hawker centre, childcare centre and community club) also allows for more amenities to be provided, which will in turn benefit the business community.


Campus Boulevard


JTC Business Park


Heritage Trail

PROJECT DATA

Project Name
Punggol Digital District (PDD)

Location
Punggol North, Singapore

Status of Construction
Master Planning stage

Project Site Area
Approximately 50 hectares

Client
JTC Corporation's (JTC)

Master Planners
JTC; Urban Redevelopment Authority (URA)

Chief Executive Officers
Ng Lang (JTC); Lim Eng Hwee (URA)

Architecture Firm
WOHA Architects Pte Ltd

Principal Architect
Chan Ee Mun

Images
JTC

TURNING THE POWER TO DELIVER

YKGI GROUP

Project : Arena Petanque - Kuala Lumpur - Roofing Material : EnvioFlex

Since its incorporation in 1977, YKGI has been producing products that have become one of the top rapidly growing brands in the Coated Steel Products Industry. The exquisite products carried by this brand offers the newest eco-technological features. The goodwill and trust earned through our products over the years with our customers has destined YKGI as an established pioneer in the industry in continuing to deliver excellent value in our extensive range of products and services.

COLORCOAT® ZINCCOAT® BEYOND INNOVATION

ColorCoat® prepainted steel are specifically manufactured and tailored for every type of universal metal roofing, decking and cladding applications. **EnvioShield™**, **EnvioFlex™**, **EnvioTex™**, **Spectra-X™** , **Spectra™** and **Domina™** proudly stand for as the hallmark products of YKGI.

TitanZinc™ is the improved hot dip galvanised steel developed specifically for steel truss and framing components. Galvanised with Z200 zinc metallic coating, it contains a minimum high tensile strength of 570 Mpa to provide long-term corrosion resistance and better durability for structural safety.

EnvioSHIELD™ Ultra Durable Steel
Envioflex™ Thermal Reflectance Steel
EnvioTEX™ Sheer Textured Steel
SPECTRA-X™ Revolutionary Improved Steel
SPECTRA™ PREPAINTED STEEL
DOMINA™ Light Gauge Steel
TITANZINC™ IMPROVED COATED STEEL
SHINEPLUS™

YKGI GROUP OF COMPANIES

YKGI HOLDINGS BHD. (Listed on the Main Market of Bursa Malaysia Securities Berhad)	032939-U
STARSHINE HOLDINGS SDN. BHD.	920871-A
STAR SHINE MARKETING SDN. BHD.	458071-P
STAR SHINE GLOBAL TRADING SDN. BHD.	566960-K
STAR SHINE STEEL PRODUCTS SDN. BHD.	619745-P
STAR SHINE INDUSTRIES SDN. BHD.	376233-T
STARSHINE RESOURCES SDN. BHD.	927461-U
ASTEEL RESOURCES SDN. BHD.	1103206-T
ASTEEL SDN. BHD.	393042-D
ASTEEL (BINTULU) SDN. BHD.	1062228-D
ASTEEL (SABAH) SDN. BHD.	1062207-W

Kuching Office/Factory
Lot 712, Block 7, Demak Laut Industrial Park, 93050 Kuching, Sarawak, East Malaysia.
T • +6082 433 888 **F** • +6082 433 833

Sabah Office/Factory
Lot 10 Package 1 General Industrial Zone Kota Kinabalu Industrial Park,
KM26 Jalan Tuaran, 88460 Kota Kinabalu, Sabah, East Malaysia.
T • +6088 498 866 **F** • +6088 498 877

K.L. Corporate Office/Factory
WISMA YKGI :
Lot 6479, Lorong Sungai Puloh/KU06, Kawasan Perindustrian Sungai Puloh,
42100 Klang, Selangor Darul Ehsan, Malaysia.
T • +603 3297 5555/3291 5189 **F** • +603 3291 6193
E • ykgi@ykgigroup.com **W** • www.ykgigroup.com
Facebook.com/ykgihb

SIRIM, ECO-LABEL CERTIFIED TO ECO-032 CERTIFICATION NO.: EL000047
MGBC MALAYSIA GREEN BUILDING CONFEDERATION

Cert. No.: KLR 6021311
Cert. No.: KLR 6021331
Cert. No.: KLR 6021330

ClayBricks™

CLAYBRICKS & TILES SDN BHD
(co. no. 193728-V)

" Claybricks Offer A World Of Natural Beauty "

http://www.claybricks.com

The varieties of natural colors and all the enduring qualities of burnt clay give you an aesthetic appeal that exudes warmth and elegance to your home and landscape. The high wear and tear texture offers non-slip performance with minimum maintenance.

Gives your home the classic look of traditional brick house of enduring charm and elegance with our range of bricks, veneers, pavers and decorative accessories.
Suitable for both interior and exterior designs, with endless combination and styling only limited by your own imagination!

PRINCIPAL OFFICE & SHOWROOM : 6, Jln. Arung 1, Kwsn. Perind. Tmn. Johor, 81200 Johor Bahru, Johor, Malaysia.
Email : inquiry@claybricks.com Tel : 607-237 1787 Fax : 607-238 6436

K. L. OFFICE : 30-2A, Jln.9/125-D, Tmn. Desa Petaling, 57100 Kuala Lumpur, Malaysia.
Email : marketing@claybricks.com Tel : 603-9058 5033 Fax : 603-9058 5099

FACTORY : Batu 5, Jln. Mawai, 81900 Kota Tinggi, Johor, Malaysia.
Email : production@claybricks.com Tel : 607-883 4880 Fax : 607-883 4759

The Broadleaf

HOUSING PROPOSITION – THE BROADLEAF

This student project is a hybrid urban housing development, comprising three six- to eight-storey apartment blocks, on 4.97 acres in Bukit Jelutong, Shah Alam.

The blocks will have a total of 100 residential units, with basement parking, facilities and social areas, interwoven with lush greens. The apartments come in three different sizes, with 45 three-bedroom units, 30 two-bedroom units, and 25 single bedroom/studio units.

CONNECTING WITH NATURE

The development is designed to meet the needs of the community and reconnect people with nature. Thus, emphasis is placed on landscaping and creating innovative recreational spaces between the apartment blocks.

The site is a corner lot surrounded with service roads at three sides—the front faces a residential area, while the left and rear view faces an undeveloped area with a man-made lake. On the right of the building is a commercial area with shop lots.

The building is orientated so that the facilities and landscaping area faces the lake view at the rear. To take advantage of the sloping ground conditions, which has a difference of 4.7 metres from the front to the back, a cascading landscape—inspired by the terraced farming in Bali—is designed as a focal point of the development.

The apartment blocks are organised in a way that creates an open-air garden with water features and planter boxes for every floor. Landscaped ledges help soften the building's edges and allow vertical greening of the building's fabric. The rich leafy atmosphere enhances the natural connection with the forested surroundings, with enriched air ventilation.

Cascading landscaping as the development's focal point

Interaction between architecture and landscaping at the drop-off area

The organic-shaped infinity swimming pool extends the rear view

Greens are distributed along the circulation paths for use by the community. The large infinity swimming pool, water features and man-made pond around the site are for recreational use, as well as for evaporative cooling.

GREEN PRINCIPLES

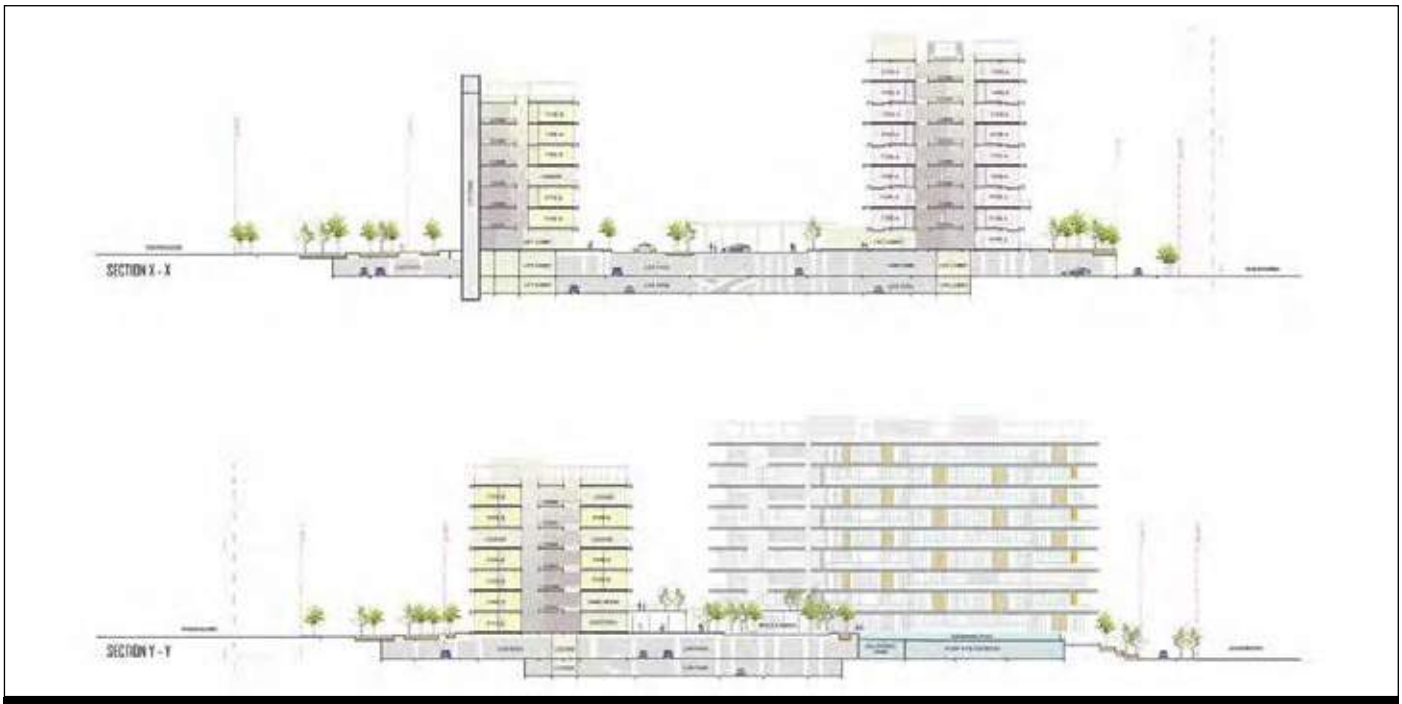
The Broadleaf is planned according to sustainable Green principles. Its mostly north–south orientation avoids direct sun exposure and reduces the need for shading devices and cooling systems. Vehicle access is controlled around the building, while the surrounding fire access service road is 'camouflaged' as a bicycle and jogging track to reduce vehicular footprint and to promote a healthy lifestyle.

CONSTRUCTION

The project is designed using the post and beam construction at the basement and roof levels, with a transfer slab on the ground and first floors. The apartment levels, from the first to eighth floor, is supported by a shear wall. The highest level, which is also the servicing level containing the water tank and lift motor room, is covered with zinc-aluminium metal roofing. The elongated metal roofing is sloped by 3 degrees to the direction of the lift core for rain water discharge.

Architecture features such as the spiral staircase, pedestrian roofing and the bridge are all built as steel structures. The façades of the apartment blocks are decorated with wood-stained fibre cement planks, combined with grey walls and dark-coloured aluminium shading devices. The simplicity of the façade design and calm colour scheme helps to balance the complexity of the building layout and building form.

Most of the materials used—such as the reinforced concrete structure, fibre cement planks, aluminium sun shading, porcelain tiles and zinc-aluminium metal roofing—are sourced or produced locally for convenience.



Section views

Ground floor plan

PROJECT DATA

Student Name
Maisura Yong

School
Limkokwing University of Creative Technology

Programme
Bachelor of Science (Architectural Studies)
(Graduated July 2017)

Instructors
Sharonee Sidek; Ar Azman Zainal Md Nor

Project Name
Housing Proposition – The Broadleaf

Location
Bukit Jelutong, Shah Alam, Malaysia

Site Area
20,118 square metres

Gross Floor Area
42,024 square metres

Number of Units
100

Building Height
8 storeys; 37 metres

Images
Maisura Yong

Retail façade

THE INHERIT

The student project's intent is to design a retail space to encourage the younger generation to appreciate the beauty of jade. Choo Yilin is a brand that seeks to fuse sustainability with luxury. As the brand is known for its modern interpretation of jade jewellery in sculptural, organic forms, paired with richly coloured gemstones, the interior design of the space should tell a story of conservation, heritage and love.

The project brief required students to choose a shop in the Plaza Singapura mall. This store was selected after analysing the flow of the shoppers and consumer types—the unit is located at level one, near the main entrance of the shopping mall, attracting mostly women shoppers.

The main materials proposed for this project include stainless steel, glass and marble. Glass will be used for the storefront to provide an opportunity for window shopping. Stainless steel will be applied to the façade design, signage and decorative cladding due to its durability.

Inspired by the brand's philosophy of infusing modernity into a stone typically regarded as 'old-fashioned', the space uses circular shapes to help inject a sense of trendiness, to break the traditional mindset of consumers towards jade. The name of the shop implies the cultural inheritance of passing down jade jewellery from the older generations to the younger ones.

The circular forms are also strongly used in the façade design to attract the attention of the target audience. The circular glass allows passers-by to peek into the retail space, as if viewing through a looking glass. Circles and arcs are also applied onto the furniture and spatial flow of the space. The display cases and features are elegantly designed to draw customers' eye to take a closer look. The private consultation area offers clients space for a more intimate and personalised experience; as such, the stainless steel arcs are used to create a semi-enclosure for this purpose.

Stainless steel arcs carve out semi-enclosures for more intimate experiences

Circular design cases and features invite customers to take a closer look

Semi-private consultation area

PROJECT DATA

Student Name
Lim Siew Kei

School
Nanyang Academy of Fine Arts (NAFA)

Instructor
Shin Jung Hoon

Project Name
The Inherit

Location
Plaza Singapura #01-63/64, Singapore

Site Area
90 square metres

Images
NAFA

x'traseal®

The most **Comprehensive Adhesive Sealant**

for Hi-Tech Building Construction!

日本高技术改良密封粘接胶

MS POLYMER

MSポリマーシーラント

MALAYSIA • SINGAPORE

25TH ANNIVERSARY

PROJECT REFERENCES

1. *ALILA BANGSAR, KUALA LUMPUR*
2. *DESA PARK CITY WESTSIDE III, KUALA LUMPUR*
3. *D'SARA SENTRAL, SUNGAI BULOH, SELANGOR*
4. *UNIVERSITY READING OF MALAYSIA, JOHOR*
5. *TWIN GALAXY RESIDENCES, JOHOR*
6. *TROPICANA BAY RESIDENCES, PENANG*
7. *ARDMORE RESIDENCE, SINGAPORE*

MGBC

GreenLabel SINGAPORE
040-036
Low Emission
Low Toxicity Adhesive / Sealant

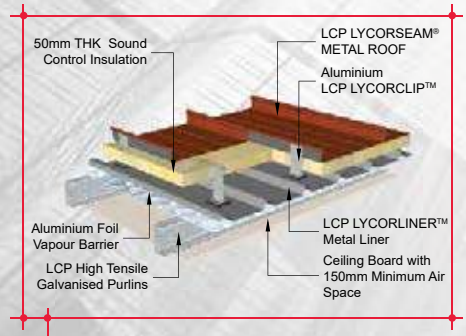
MOHM CHEMICAL SDN BHD (REG NO 276851-U)
No. 32, Jalan Temenggong, Off Jalan Tampoi, 81100 Johor Bahru,
Johor Darul Takzim, Malaysia.

Email info@mochem.com Web www.xtraseal.com Fb facebook.com/xtraseal1993 Insta xtrasealofficial

ISO 14001 CERTIFIED COMPANY

ISO 9001 CERTIFIED COMPANY

Taking off to Newer Heights with our
Architectural Steel Roof Solutions



LCP LYCORSEAM® STC 56 ROOF

Featuring our LCP LYCORSEAM® profile:

- A mechanical seamed profile with concealed clip fixing allowing free movement under thermal expansion.
- Continuous roof length without end lapping ensuring sheet integrity and inherent weather-tightness.
- Specially designed built up systems can respond to specific requirements for Thermal, Acoustic, Structural and other performance considerations.
- Available in straight, tapered, curved and waveform roof shapes giving the designer an aesthetic yet economical roofing system.
- Our premium standing seam profile is produced in Clean COLORBOND® ULTRA Steel providing the superior performance and strength of steel.

Colorbond® steel is classified as CLASS '0' in accordance to BS 476 PART 6 & 7. The base material Zincalume® steel is non-combustible in accordance to BS 476 PART 4.

Colorbond® Zincalume®

Photographs of the premises displayed in this Brochure are not to be construed as an endorsement or recommendation by the owners of the premises to LCP and its products.

LCP BUILDING PRODUCTS PTE. LTD.
CO. No. 200009173 C

No. 6 Gul Circle, Singapore 629562

Tel: (65) 6865-1550 Fax: (65) 6861-4218
Email: lcp@lcp.sg website: www.lcp.sg

LCP BUILDING PRODUCTS PVT. LTD.
(CO. No. U28112 TN2004 PTC053236)

"Swathi Court", Flat No. 4-B, 2nd Floor, Old No. 22, New No. 43, Vijayaraghava Road, T. Nagar, Chennai 600 017, India

Tel: +91 44 2815 4406/08
Fax: +91 44 2815 4407
Email: lcpindia@lcpgroup.asia
website: www.lcpindia.com

A member of LCP Group of Companies

CERT NO. FM 59595
BS EN ISO 9001 : 2008