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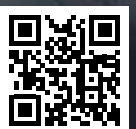
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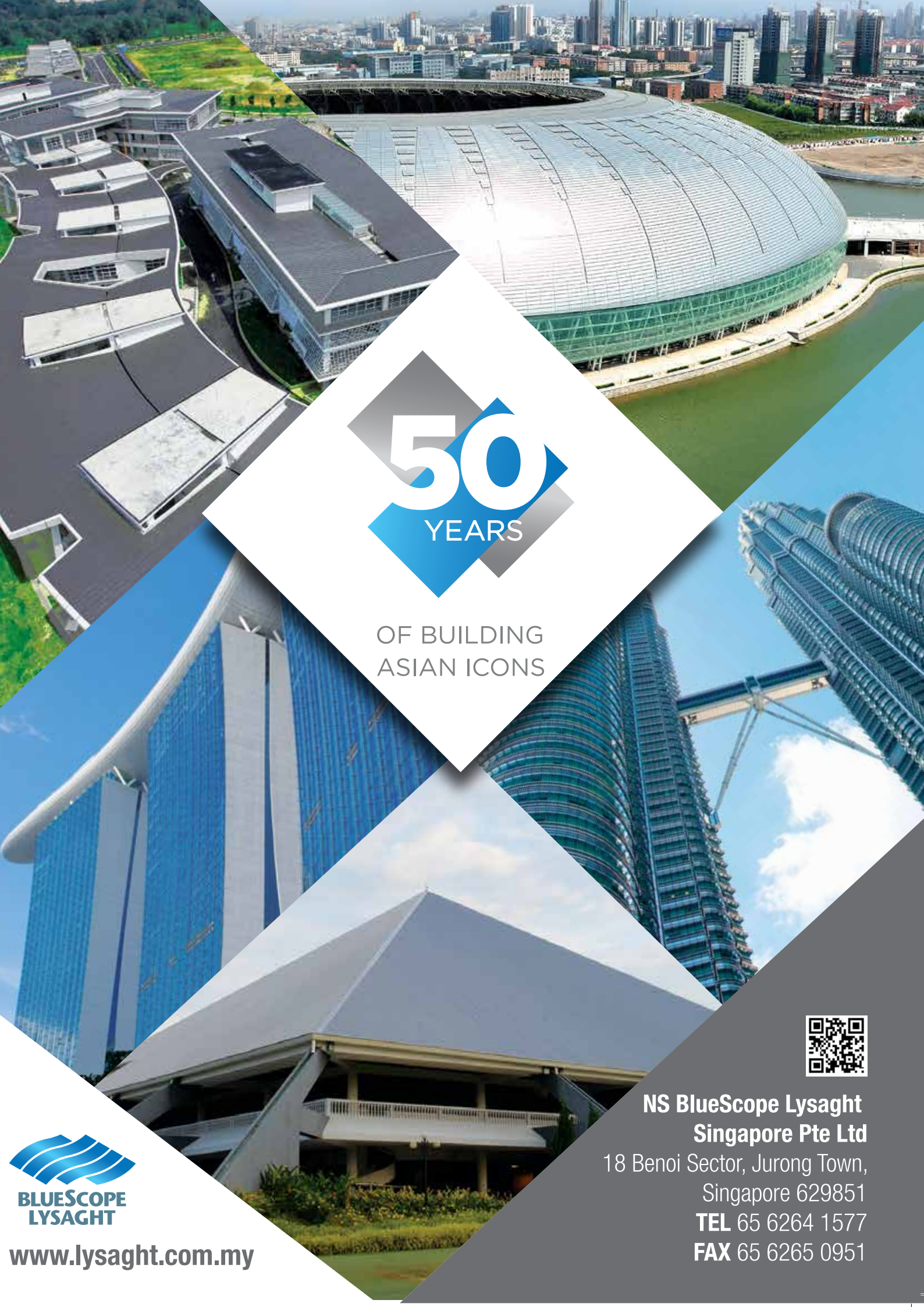
## Terminal 3 Shenzhen Bao'an International Airport

Guangdong, China

**ARCHITECTURE** Joo Koon Integrated Transport Hub in Singapore; New passenger terminal at Prince Mohammad Bin Abdulaziz International Airport in Madinah, Saudi Arabia; Kutaisi International Airport in Georgia & Expansion of Copenhagen Airport Pier C **INTERIOR** Office **LANDSCAPING** Outdoor Fitness Equipment **SHOW REVIEWS** ArchXpo 2015, BuildTech Asia 2015 & World Architecture Festival 2015 **SHOW PREVIEW** WORLDBEX 2016



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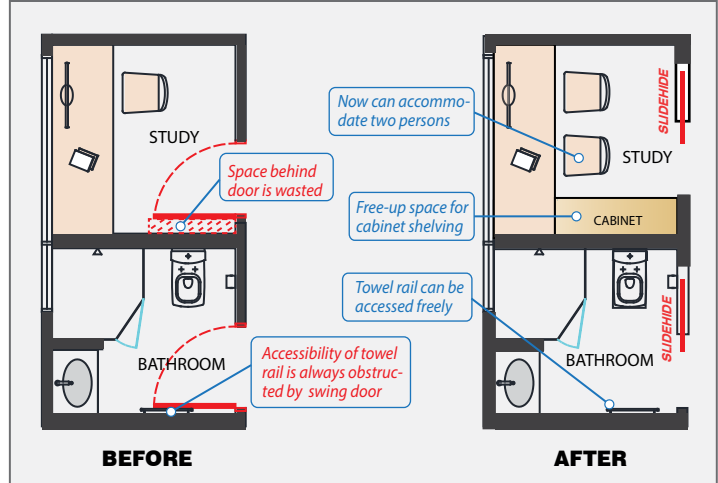
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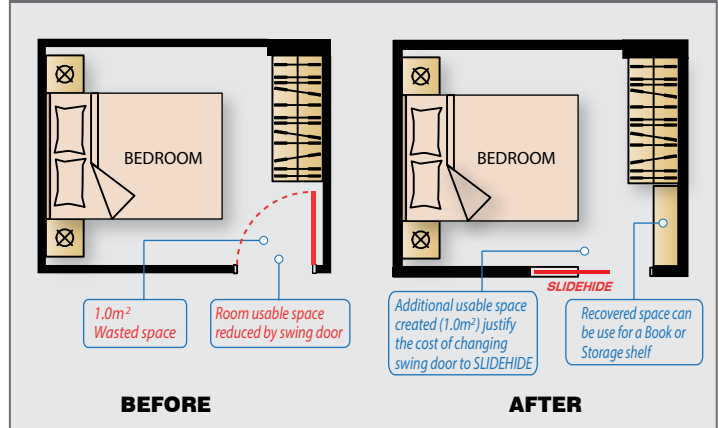


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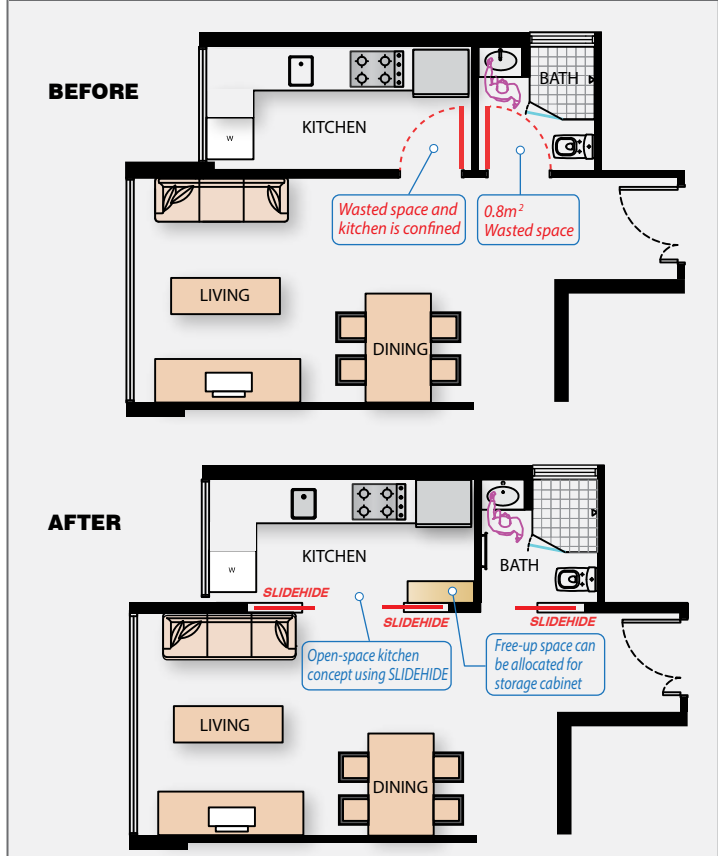
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jan - feb 2016

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**On the Cover:** Shenzhen Bao'an International Airport - Terminal 3, Shenzhen, Guangdong, China. Photo: © Leonardo Finotti

Cover design by Fawzeeah Yamin

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## editor's note



**D**ear readers, let me start off by wishing each and every one of you a very happy new year. My team and I would like to thank you for all the support that you have shown to us in one way or another. Throughout the years, our mission has been the same: to produce quality content that keeps readers engaged and gets our advertisers results. We're hoping that 2016 will be just as good or even better.

In the Jan/Feb issue, we explore the architectural design of transportation projects such as airports and train stations and the challenges associated with it. In the interior design section, we look at how more and more offices are being designed to reflect the corporate philosophy and vision of companies. Besides playground equipment, outdoor fitness equipment is becoming a common and must-have feature of many public parks and neighbourhoods today. Read about outdoor fitness equipment in the landscaping section.

Finally, we have a couple of show reviews to share with you. In 2015, we covered ArchXpo, BuildTech Asia and World Architecture Festival and we are pleased to bring you the reports of the shows in this issue. If you are going to WORLDBEX 2016, one of Philippines' largest building and construction exhibitions, then do read our show preview inside.

Enjoy this issue. Don't forget to visit and "Like" our Facebook page. Bye for now!

*Amita Natveelal*

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### PUBLISHER

Steven Ooi (steven.ooi@tradelinkmedia.com.sg)

### EDITOR

Amita Natveelal (seab@tradelinkmedia.com.sg)

### GROUP MARKETING MANAGER

Eric Ooi (eric.ooi@tradelinkmedia.com.sg)

### MARKETING MANAGER

Felix Ooi (felix.ooi@tradelinkmedia.com.sg)

### ASSISTANT MARKETING MANAGER

Chua Jie-e (jieee.chua@tradelinkmedia.com.sg)

### HEAD OF GRAPHIC DEPT/ADVERTISEMENT

### CO-ORDINATOR

Fawzeeah Yamin (fawzeeah@tradelinkmedia.com.sg)

### GRAPHIC DESIGNER

Siti Nur Aishah (siti@tradelinkmedia.com.sg)

### CIRCULATION

Yvonne Ooi (yvonne.ooi@tradelinkmedia.com.sg)

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## Tishman Speyer and GIC establish joint venture for WaveRock project in Hyderabad, India

**Singapore** – Tishman Speyer, one of the world's leading developers, owners, operators and asset managers of first-class real estate, and GIC, Singapore's sovereign wealth fund, today announced the formation of a 50/50 joint venture to own Tishman Speyer's Waverock office development project in Hyderabad, India.

Originally designed by one of the world's leading architecture firms, Pei Cobb Freed & Partners, Waverock's Phases One and Two, comprising 1.5 million square feet, were completed in 2010 and 2014 respectively. These are fully leased to global technology, industrial & services giants such as TCS Accenture, DuPont, Cap Gemini, BirlaSoft and other high-growth multinational companies. The final Phase Three is currently under development and expected to be completed over the next two years.



WaveRock in Hyderabad. Photo: © Tishman Speyer

Waverock has received LEED Gold for Core & Shell™ certification, with Phase Three to be constructed to meet the same standards.

Total build-out for the property, which is located near the high-growth Financial District employment corridor at Gachibowli, a Special Economic Zone being promoted by the TSIC (Telangana State Industrial Infrastructure Corporation), will be 2.5 million square feet and will serve more than 20,000 professionals upon completion.

"GIC has been one of the world's most successful institutional property investors for many years," said Tishman Speyer senior managing director Michael Spies. "The decision to co-invest in the Waverock project with us is very exciting and gratifying. We are very confident that this will be a successful collaboration and that Waverock will continue to be the cornerstone of our firm's growing presence in India," he added.

Mr Loh Wai Keong, managing director and co-head Asia, GIC Real Estate, said: "GIC is confident in Hyderabad's future as one of the fast-growing cities in India and WaveRock will be an accretive income asset in our portfolio. We look forward to partnering with Tishman Speyer, a leading international manager and owner of real estate globally, in this joint venture. We hope to leverage our mutual strengths to explore more investment opportunities together in India."

## Singapore Landscape Architecture Awards 2015 winners announced

**Singapore** – The Singapore Institute of Landscape Architects (SILA) held its 10th biennial Singapore Landscape Architecture Awards (SLAA) and Gala Dinner at the Pan Pacific Singapore hotel on 12th October 2015. The event was attended by Guest of Honour Mr Robert Tomlin, Chairman of DesignSingapore Council together with landscape architects and strategic industry partners.

The awards aim to set new benchmarks and distinctions in the design and practice of Landscape Architecture. With 61 submission entries, SILA managed a rigorous two-stage judging process by 15 judges from nine countries. The entries were submitted to six categories, including Commercial Buildings, Hotels, Institutions, Master Planning, Parks and Public Spaces. The international jury consisted of both present and past presidents of Landscape Architecture Institutes, as well as respected landscape practitioners. Many members of this jury belong to the International Federation of Landscape Architects Asia-Pacific Region (IFLA APR).

"As the nation celebrates its Jubilee, we also celebrate SILA's 30th anniversary. This is a special year in which we have the pleasure of launching the Landscape Architecture Accreditation programme. This marks significant growth for the profession of landscape architecture as Singapore transits into a city in a garden of lush greenery and enhanced biodiversity for our people," said Damian Tang, President of SILA and IFLA APR.

The first stage of the judging process was conducted online. It included representatives from Africa, Australia, Europe, Japan, Malaysia, New Zealand, South America, and Thailand. Consequently, the second stage of the judging process integrated site visits and table discussions. The on-site panel consisted of representatives from SILA, Singapore Institute of Architects, Centre For Urban Greenery and Ecology, Prime Minister's Office, Design Business Chamber Singapore and, as well as faculty from National University of Singapore.

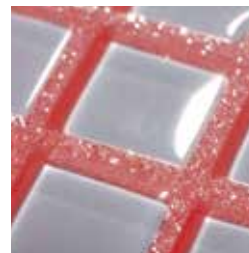


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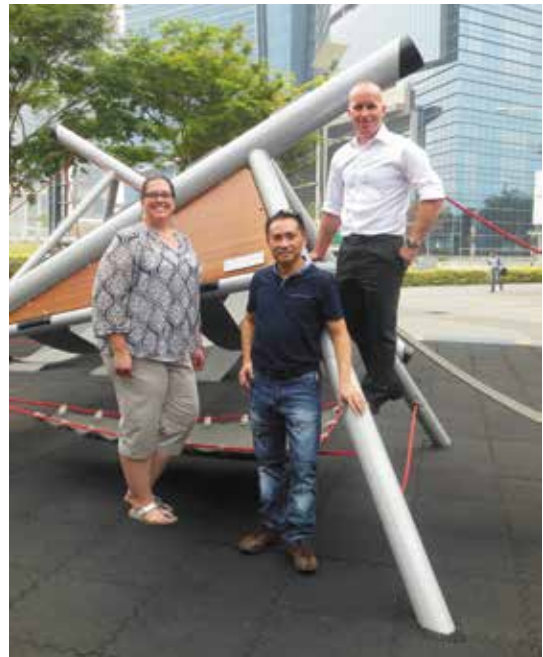
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## CT-Art Creation launches a new 'sculptural' playground in Singapore



**Singapore** – CT-Art Creation Pte Ltd, a leading playground equipment supplier, has launched a new play equipment called the 'Playform 7' in Singapore. Manufactured by Playworld, Inc., Playform 7 is a modern merge between sculptures and play equipment. It resembles a sculpture and serves as a playground for children 5+ and a focus has been on creating a cool product for teenagers. The Playform 7 equipment will be permanently installed outside the Verve Pizza Bar @ Marina Bay by mid-November 2015. The equipment is sponsored by Playworld and CT-Art Creation to the Urban Redevelopment Authority (URA) and Singapore.



From left to right: Robyn Gordner, Art Director, Playworld, Inc., Patrick Lee, Director, CT-Art Creation Pte Ltd; and Andreas V. I. Paaske, International Sales Manager, Playworld, Inc., posing with the new Playform 7.

Commenting on the launch, Patrick Lee, director, CT-Art Creation Pte Ltd said that the Playform 7 is developed as a sculptural playground, which means that it serves both as a sculpture and a playground. "Playworld is always bringing something new to the market. The company is going global and it is introducing Playform 7 here as it fits in well with the urban setting of Singapore."

Playform 7 is built to last a lifetime, made with top-quality materials, and heavy-duty galvanized steel. The ropes in the Playform 7 are made of Kevlar, a synthetic fiber of high tensile strength. Like all playground equipment.

Also present during the launch were Andreas V. I. Paaske, International Sales Manager, Playworld, Inc., and Robyn Gordner, Art Director from Playworld. According to Andreas, the Playform 7 is with its contemporary mix of sculpture and play, something new that kids have never seen before. "Playform 7 is very dynamic and open-ended product that engages children and teenagers in a new way. It is also something aesthetic that blends well into the urban landscape of Singapore," he said.

"Singapore is one of the most innovative cities in the world with a mix of cultures. This city is unique and forward-thinking, so we believe that Playform 7 will fit nicely with the urban landscape," he added.

Playform 7 is available in Singapore through CT-Art Creation Pte Ltd. For more information, e-mail [enquiry@ctart.com.sg](mailto:enquiry@ctart.com.sg) or visit [www.ctart.com.sg](http://www.ctart.com.sg).

## DBCS and TÜV SÜD sign MOA to launch new certification for the local design industry

**Singapore** – The Design Business Chamber Singapore (DBCS) is partnering globally recognised certification body TÜV SÜD to introduce Singapore's first certification for the design industry. This move aims to raise local design standards as well as enhance professionalism. Dubbed the Singapore Design Class – or SDC for short – the certification will be the first standard in Singapore focusing on excellence in product & service design processes and capabilities. The certification is part of DBCS' array of initiatives to raise professionalism and uplift the local design industry. Recent initiatives have included the Green Business Design mark in October 2015 under the Singapore Good Design Mark (SG Mark), which encourages and champions holistic design practices benchmarked for global competitiveness.

Announcing the certification, President of DBCS Mr Tai Lee Siang, said, "This is the very first design certification programme in Singapore that certifies the competency of design firms holistically. It covers six core areas – creative process and innovation, continuous improvement, project management, client relations, business management and ethics."

Under the Memorandum of Agreement (MOA) which was signed between Mr Klaus Langner, CFO of TÜV SÜD ASEAN and Mr Tai Lee Siang, TÜV SÜD serves as the assessment body providing the necessary technical expertise and advice as well as assist in the development of the assessment criteria and certification. It will be primarily responsible for the certification requirements and regular reviews of the standards. DBCS will provide supporting technical expertise and content for SDC, on top of marketing, promoting and administering the certification. Both DBCS and TÜV SÜD will regularly review the certification and will jointly sit on the decision committee for the issuance of the certification. Application for the certification costs S\$3,800 for DBCS members, and S\$4,500 for non-members. Recertification fees will cost S\$2,000 and S\$2,700 for members and non-members respectively.



TÜV SÜD ASEAN CFO Mr Klaus Langner (2nd from left) and DBCS President Mr Tai Lee Siang (2nd from right) exchanging and displaying the signed MOA for Singapore Design Class. Witnesses for the MOA signing are Mr Clement Teo, SVP Management Services, TÜV SÜD ASEAN (far left) and Mr Ulrich Schraudolph, R&D Director, DBCS (far right). Photo: ©DBCS

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## Extra Space Asia partners with LYS Energy to go green

**Singapore** – Extra Space Asia, a self-storage provider headquartered in Singapore and with operations in five Asian countries, has announced its partnership with LYS Energy, a Singapore-based Independent Power Producer (IPP), on an initiative to rely on solar energy for a portion of the company's electricity consumption in two of their seven storage facilities in Singapore.

According to Extra Space, this alliance makes Extra Space the first self-storage company in Singapore to use solar energy for some of its energy needs – via the installation of solar panel systems on the roofs of its Kallang Way and Boon Keng facilities.

“As the discussions around sustainable energy come to the forefront in Singapore, it's necessary for business leaders to incorporate 'green' strategies and move towards business models that prioritise sustainability,” said Kenneth Worsdale, CEO at Extra Space Asia. “We're pleased to be working with LYS Energy on our solar panel initiatives for two of our facilities, and reduce our carbon footprint. We hope to be a part of Singapore's push for a more sustainable future.”

The Kallang Way and Boon Keng storage facilities are fully outfitted with solar panels and are expected to be fully operational from this month. Once operational, the solar panel system is expected to deliver an estimated 169MWh of clean energy annually, covering upwards of 10 percent of electricity consumption for the Boon Keng storage facility, and 15 percent of the Kallang Way facility. This is roughly equivalent to the amount of energy required to power 43 homes for one year. Both solar systems will offset 73 tonnes of carbon dioxide emissions, which is equivalent to 9 cars being taken off the road for one year, or planting an additional 3,000 trees.

“We are very pleased to support Extra Space in their efforts to make their business more environmentally friendly,” said Lionel Steinitz, chief executive officer at LYS Energy.



Solar panel systems on the roof of Extra Space Asia's Kallang Way facility.

## Benoy announces work on CITS Sanya tourism scheme in Hainan

**Hong Kong** – Benoy has announced its appointment to the new China International Travel Service (CITS) Sanya Eyot scheme being developed in Haitang Bay. This is Benoy's first mixed-use Masterplan and Architecture commission on China's famous island and southernmost province, Hainan.

The CITS Sanya Eyot development is located in the new resort area of Haitang Bay in Sanya. Rising as a high-end tourism destination, the area attracts visitors from around the world as a result of its world-class yachting community, international luxury hotel cluster and unspoiled natural assets.

The scheme will introduce a 32,000 square metres mixed-use, retail-led destination which will be differentiated from the traditional retail projects currently in Haitang Bay. Benoy's Masterplan has prescribed strategies for celebrating the island landscape, placemaking and multi-layered environments, to establish a point of difference for this high-profile future scheme.

Benoy's design will feature a combination of indoor and outdoor spaces which will host a multitude of activities including art, water shows, cultural performances, recreational attractions, wellness programmes, children's zones and possibly a wedding chapel. Taking inspiration from Sanya's local fauna, the Egretta Garzetta formed the concept behind the architecture of the development; the sweeping architectural lines mimic the graceful movement of the birds.

The architecture also prioritises human-scale within the development with a number of small-scale blocks and pavilions designed along the waterfront edge. The collection of forms and differing façade treatments complement the faceted landscape and will add interest and variety to the visitor experience.

The CITS Sanya Eyot scheme will commence construction in early 2016 and is due for completion at the end of 2018.



Photo: © Benoy

## Arup takes home top honour at the IStructE Structural Awards 2015 for the Singapore Sports Hub

**Singapore** – Arup was recognised with the highest accolade at The Institution of Structural Engineers (IStructE) Structural Awards 2015.

The Singapore Sports Hub, for which Arup was the structural engineer, won the Supreme Award for Structural Engineering Excellence. This is the highest accolade of the ceremony and is given at the judges' discretion, to the project that has distinguished itself from all submissions in 2015, and for being the finest global example of structural engineering design in the year.

The Singapore Sports Hub is home to the world's largest free-spanning dome of 310 metres, the approximate width of four A380 aeroplanes parked wing to wing. The roof, which covers the 55,000-seat sports stadium, also sets new benchmarks in efficiency of design and material usage, utilising a third of weight of steel normally used in a span of this size.

"It is a rare honour to have worked on and led the design for the Singapore Sports Hub – a fantastic project, with contributions from so many talented people. I am elated with the recognition the project and team have received, and am particularly proud of the work Arup has done on the National Stadium roof. Working under intense pressure, the team delivered exceptional technical work with a brilliant outcome. They pushed the boundaries of technology and thoroughly deserve this recognition," said Andrew Henry, Project Manager, Arup.



The Singapore Sports Hub. Photo: © Darren Soh

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## Foshan and Oklahoma City selected as winners of ULI Urban Open Space Award

**Hong Kong** – Two urban parks – one in Foshan, China, the other in Oklahoma City – have been selected as winners of this year's Urban Land Institute (ULI) Urban Open Space Award. Thousand Lantern Lake Park System in Foshan, Guangdong, China and Myriad Botanical Gardens in Oklahoma City were honoured on 8th October 2015 at the ULI Fall Meeting in San Francisco.

The annual award recognises outstanding examples of successful large- and small-scale public spaces that have socially enriched and revitalized the economy of their surrounding communities. The competition includes a cash prize that goes to the organisations responsible for the maintenance and upkeep of the winning park spaces.

Thousand Lantern Lake Park System owned by the Nanhai District Government and designed by the SWA Group, is a park system that represents a defining infrastructural effort that is integral to Nanhai's strategic approach of urban transformation within a successful, people-oriented urban development district. The park system provides a creative solution for attracting people to its newly constructed Guangdong Financial High-tech Industrial Zone.

Myriad Botanical Gardens owned by the Myriad Gardens Foundation and designed by the Office of James Burnett, and Murase Associates, is a joint investment effort that takes a highly-underused yet prime 15-acre urban downtown garden and park site that had fallen into disrepair, and turns it into a state-of-the-art, highly active destination to improve the quality of life in Oklahoma City and continue the renaissance of the entire downtown.

"Our jury was impressed with the number of submissions that creatively transformed the urban landscape while remaining sensitive to the nuances of the real people who will populate it," said jury chair Michael Covarrubias, chairman and chief executive officer of TMG Partners in San Francisco, California. "As this is the first year the competition was open to submissions from across the world, the finalists and winners all serve as international case studies demonstrating how cities can leverage open space to create value to cities and entice more useful, healthy downtown activity," he added.



Thousand Lantern Lake Park System in Foshan, Guangdong, China. Photo: © ULI



Myriad Botanical Gardens in Oklahoma City. Photo: © ULI

## Büro Ole Scheeren expands with new offices in Berlin and Bangkok

**Beijing, China** – In recognition of its growing international portfolio, Büro Ole Scheeren announces the expansion of its office structure with the opening of two new studios in Berlin and Bangkok. To mark its 5th year anniversary and conduct projects across East Asia, Europe and North America, essential positions to the management team are being appointed including a new CFO and a new partner.

"It has been a very productive initial five years of Büro-OS and I'm excited to open two new offices and actively increase our engagement around the world," said Ole Scheeren.

Büro Ole Scheeren's Berlin studio will act as a European base for work across the western hemisphere, while Büro Ole Scheeren in Bangkok, together with its subsidiary HLS, is charged with the further design development and construction supervision of the MahaNakhon tower, soon to be completed as Thailand's tallest skyscraper.



Büro Ole Scheeren core group. Photo: © Büro-OS

## RAKtherm achieves growth and strong global market share

**Dubai, UAE** – RAKtherm – a leading German certified brand and global manufacturer of PPR and PEX piping systems has manifested a significant market growth in less than eight months this year as the company grabbed more market share. Apparently, several distribution contracts for export were signed and tied up as joint venture for new points of distribution for further market penetration as RAKtherm logged strong worldwide market demand. The growth is attributed to the increasing demand for highly competent piping systems across Asia, Africa, Europe, and GCC.

RAKtherm comprises a complete line up of outstanding product portfolio of proven brands for PPR, PEX, Reinforced, and anti-UV Piping Systems.

“We manufacture the worlds’ most versatile and comprehensive piping systems utilising advance technology and the in-house engineering team’s expertise for performance-driven piping solution that will efficiently perform for over 50 years,” said Mr Mohammed Habib, Sales and Marketing Manager of RAKtherm.

RAKtherm systems are engineered precisely for higher level of piping service performance that is proven to be highly resilient even at the most extreme conditions with excellent physical and chemical properties. Tested, conformed, and certified by DVGW, SKZ, HY, and TUV affirming that it is suitable for global distribution and utilization.

Globally recognised for being a high-end source for ultimate piping solutions, RAKtherm had series of major MEP projects partnerships both locally and internationally through a distribution network of RAKtherm stockists in 35 countries worldwide.

Granted that rise on market share is attributable to RAKtherm’s technical expertise and extensive market knowledge that excels in understanding the requirements of the piping industry, RAKtherm continuous to saturate the global mainstream market.



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## Building towards a better future

*BUILDTTECH, one Malaysia's leading building exhibitions, is looking to play a bigger role in the Asian market.*

**Malaysia** – The 2015 edition of BUILDTTECH, one of Malaysia's largest exhibitions for the building tools, materials and technology industries, came to a close on 10th October 2015 after having welcomed over 200 exhibitors from 10 countries around the world, with a record 63 percent of exhibitors coming from outside Malaysia.

The exhibition, which was organised by Trade Link ITE Sdn. Bhd., was held from 7-10 October 2015 at the Putra World Trade Centre in Kuala Lumpur. Over the three days, BUILDTTECH gave 7139 local and international visitors a chance to witness some of the world's most advanced building technology in Malaysia for the first time.

There was a comprehensive profile of technology available to visitors covering the entire spectrum of the building industry. In addition to an extensive range of traditional and modern building materials, manufacturers also featured wares developed for niche industries including a section focusing exclusively on eco-friendly building materials.

This diversity was enhanced by the presence of four co-locating exhibitions, namely the International Construction Machinery, Equipment, Accessories, and Technology Exhibition (CONMAC), the Construction Materials Show (CONMAT), the Building Material, Architecture & Interior Exhibition (A&I) and the Malaysia International Hardware Show (MHS), which featured specialist technology catered to the construction machinery, construction materials, architecture and hardware fields respectively.

Trade Link ITE's Managing Director Dato' Albert Lai said: "This year's edition of BUILDTTECH was a huge success for us as it showed just how big a role we have to play in connecting world-class suppliers and buyers from all across Asia".

"While BUILDTTECH has always been an important event for Malaysian producers to find new technology and elevate standards, we also know that Malaysia possesses all the necessary attributes of a hub for the industry in the region, and we intend to continue playing a key role in helping Malaysia to assume this position," added Dato' Albert.

Reflecting the importance of the exhibition to national branding, BUILDTTECH once again received the endorsement of a range of influential government agencies including the Ministry of International Trade and Industry (MITI), from which the Second Minister of International Trade and Industry, Dato' Seri Ong Ka Chuan officiated the opening ceremony, the Ministry of Works Malaysia (KKR), the Malaysia External Trade Development Corporation (MATRADE), the Public Works Department Malaysia (JKR), the Malaysian Timber Industry Board (MTIB) and the Malaysian Investment Development Authority (MIDA).

For more information, visit [www.tradelink.com.my/buildtech](http://www.tradelink.com.my/buildtech).



On the second day of BUILDTTECH 2015, the opening ceremony of the exhibition was graced by guest of honour YB Dato' Seri Ong Ka Chuan, Minister II of MITI.

## MAISON&OBJET ASIA (M&O ASIA) 2016 to showcase innovative design concepts and solutions for the Asia Pacific interior design markets

**Singapore** – MAISON&OBJET ASIA (M&O ASIA), a trendsetting salon in Asia Pacific, returns in 2016 and will take place from 8 to 11 March 2016 at the Marina Bay Sands Expo and Convention Centre.

M&O ASIA not only reflects the industry trends of the region, but also a unique identity that sets it apart from its sister salons in Paris and Miami Beach.

As it enters its third year, M&O ASIA will place itself as a hub in Asia-Pacific where property developers, hoteliers, restaurateurs, interior designers, and architects can network and gain deeper insight into the latest trends and market development in the design industry.

With its first two editions, M&O ASIA has seen a trend in its visitor profile that reflects Asia's rapidly growing property development, real estate, and hospitality industries. 50 percent of the visitors to the 2015 salon were from these



Design concept by Sempre at M&O ASIA 2015. Photo: Courtesy of M&O.

sectors, resulting in a visitor profile that is markedly different from that of M&O PARIS.

Among some of the more prominent visitors include property developers The South Beach (Singapore), Sansiri (Thailand), JUT Living Development (Taiwan), Hong Kong Parkview Group (Hong Kong) and MORI Development (Japan); hoteliers COMO Hotels and Resorts (Singapore), Oberoi (India), and The Peninsular Hotels (Hong Kong); designers WOHA (Singapore), Kerry Hill Architects (Singapore), Wilson Associates (Singapore), Junglim Architecture (Korea), and LRF Designers (Hong Kong).

With this in mind, the 2016 salon will see a greater focus on providing a more targeted showcase for property developers, hoteliers, restaurateurs, interior designers, and architects. M&O ASIA has formed a partnership with MIPIM ASIA, a leading summit for property leaders in Asia-Pacific, to further connect with the real estate markets.

#### **A unique showcase of hospitality design concepts**

In response to the fast-moving hospitality industries of Asia-Pacific, the mission of M&O ASIA 2016 is not only to introduce exquisite interior design brands but also to provide inspiration and concepts for projects like luxury/boutique hotels, haute cuisine and spa experience. These concepts will illustrate how different techniques, materials, accessories and finished products can converge together to create enchanting yet

functional interiors to meet the everchanging requirements of high-end hoteliers and restaurateurs.

Among some of the available concepts that visitors can explore are the two cafés within the salon designed by Eichholtz from the Netherlands and Sempre from Belgium.

Taking their highly successful experience in the September edition of M&O PARIS 2015, both Eichholtz and Sempre will present thematic environments which reflect their design philosophy and unique craftsmanship.

In addition, Singapore's successful home-grown brand Supermama will present a thematic retail-cum-exhibition project 'Blueprint for a Boutique Hotel Shop' at M&O ASIA 2016. The space draws on research conducted by Supermama on the various elements of a boutique hotel room as well as the material aspect of a hotel, such as its vision and cultural significance of its locality.

The results of the research will be translated into a publication and an exhibition that offers a practical breakdown of the exhibited objects, including the brand, manufacturer, material and purchasing information. The accompanying retail section will see a curated display of contemporary gift items and souvenirs, with Singapore providing the context for the curation. The entire project aims to offer hoteliers a method of creating boutique hotel gift shops.

**For more information, visit [www.maison-objet.com/en/asia](http://www.maison-objet.com/en/asia).**

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## Winners of Singapore Sustainability Awards 2015 announced

**Singapore** – 10 private and public sector organisations were recognised for their commitment to sustainable business practices at the 2015 Singapore Sustainability Awards (SSA) Gala Dinner on 21st October 2015. Held at Grand Copthorne Waterfront, the award ceremony was graced by Mr Masagos Zulkifli Bin Masagos Mohamad, Minister for the Environment and Water Resources. The winners are lauded for their sustainable business practices, pro-environment operations and performance management systems, corporate social responsibility, innovation and green technology implementation.

Currently into its sixth year, the SSA is the apex recognition programme of the Singapore Business Federation (SBF), which showcases the most commendable sustainable practices and green solutions amongst organisations in Singapore. The Awards comprises two categories – the Sustainable Business Awards (SBA) and the Green Technology Awards (GTA), serving as a yardstick for organisations to benchmark against the standards of top companies.

This year, Elmich Pte Ltd is the sole recipient of the Top Honour title, under the GTA Small & Medium Enterprise (SME) category. Elmich is a leading engineering solutions company specialising in urban landscaping, construction and storm water management. Elmich presented a well thought-out sustainability plan and stood out with their exceptional business strategy implementation. They also demonstrated a strong commitment to sustainable business practices through their value proposition, with sustainability incorporated across four areas – people, processes, products and planet.

Also under the GTA category, three other winners attained the Achievement of Excellence title – Gashub Technology Pte Ltd (SME category), Neutrinos Engineering Pte Ltd (SME Category) and Canon Singapore Pte Ltd (Large Enterprise Category). These companies showcased innovative products that serve their intended purposes well and at a lower environmental cost.

Under the SBA category, six winners were awarded the Achievement of Excellence title – Ardentec Singapore Pte Ltd (SME Category), Buckman Laboratories Pte Ltd (SME Category), The Maritime and Port Authority of Singapore (Large Enterprise Category), Marina Bay Sands (Large Enterprise Category), Kimberly-Clark Singapore Pte Ltd (Large Enterprise Category) and Wilmar International Limited (Large Enterprise Category).

All of these companies exhibited ingenious ways of carrying out their daily operations while integrating sustainable practices into their core business structures.



2015 Singapore Sustainability Award Winners with GOH, Minister for the Environment and Water Resources, Mr Masagos Zulkifli (Second row, 7th from left), SBF representatives and Professor Ravi Kumar, Dean of Nanyang Business School, NTU (First row, 1st from left).  
Photo: © Singapore Business Federation

## New Zealand Green Building Council welcomes new Chair

**Auckland, New Zealand** – The New Zealand Green Building Council (NZGBC) announced that Mary-Jane Daly has been elected as the new Chair of the Council. She replaces outgoing Chair Tim Hooson of Jasmx, who has led the NZGBC Board for the past two years. Mary-Jane Daly joined the Board of the NZGBC in 2011. She is also an Independent Director of Kiwi Property Group Ltd, Airways Corporation of New Zealand, and a Commissioner on the Earthquake Commission. Her last corporate executive role was Executive General Manager at State Insurance. Her previous roles include Chief Financial Officer for IAG in NZ, and Group Treasurer and Risk Manager at Fonterra.

She has a strong background in banking and finance in a variety of roles in New Zealand and the UK. She has held positions at the Bank of New Zealand, and National Australia Bank and Toronto-Dominion Bank in London. She said the NZGBC had carved a strong position across the commercial and residential markets, and she was looking forward to chairing the Board at a time when the organisation was poised for step-change.

“It’s a challenging time for the property sector with a great deal of growth and opportunity. It is crucial that quality and sustainability underpin our approach to development – the NZGBC has made great strides in putting it on the agenda, and over the next few years we’ll work to ensure industry has exactly the right tools it needs to make a difference,” said Mary-Jane.



Mary-Jane Daly

## Schindler awarded large elevator & escalator project in Myanmar



Times City

**Yangon, Myanmar** – Schindler will supply a total of 79 elevators and 24 escalators to the Times City development located in the heart of Yangon, Myanmar.

Scheduled for completion by 2017, Times City is a mixed-use development that comprises office and residential towers, a luxury hotel and retail shop houses. Located in the prime Hanthawaddy roundabout locality, the Times City project will introduce modern living facilities, premium office spaces, comprehensive retail options and a 5-star hotel, all in one development.

Schindler worked closely with the project team of the developer, Crown Advance Construction Co. Ltd. from the early stages of building design since 2013. Schindler provided the study and provision of highly efficient building transportation solutions, including the state-of-the-art Schindler 5500 machine-room-less elevators which run at speeds of 3 m/s. This allows the development to achieve the utmost building traffic efficiency in accordance to the stringent international standards.

Schindler will deliver 79 elevators and 24 escalators, including 41 Schindler 3300AP elevators and 38 Schindler 5500 elevators. In addition, Schindler will be providing its proprietary Lobby Vision, a building management tool that allows single-point supervision of multiple active systems to monitor the elevators and escalators in the project.

“We are very proud and excited to supply Schindler equipment to Times City, which is the largest elevator & escalator project ever awarded in Myanmar,” said Mr. Willis Phua, the General Manager of Myanmar Jardine Schindler.

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## GreenUrbanScape Asia 2015 showcases smarter and greener urban solutions

**Singapore** – GreenUrbanScape Asia, one of Southeast Asia's leading events for urban design, landscape and greenery, returned with a bigger and better show in 2015. Held at the Singapore Expo Convention and Exhibition Centre from 5-7 November 2015, the second edition of GreenUrbanScape Asia recorded a 23 percent increase from the previous show, with 170 brands and companies from 23 countries exhibiting under one roof.

GreenUrbanScape Asia is organised by SingEx Exhibitions (SingEx), in partnership with National Parks Board (NParks), Landscape Industry Association (Singapore) (LIAS) and the Singapore Institute of Landscape Architects (SILA).

Singapore's Minister for National Development, Mr Lawrence Wong was invited to officially open the exhibition in the presence of key delegates and industry players.

Over the three days, the exhibition served as a platform for policy makers, facility owners & managers, landscape architects, architects and service providers to exchange knowledge on the latest greenery and urban design methods and discuss current cutting edge solutions and technology.

Exhibits at the show included – products, technology and construction equipment for landscaping, greenery design, playgrounds – by leading industry brands.



GreenUrbanScape Asia 2015 and International Skyrise Greenery Conference 2015 was officially opened by Mr Lawrence Wong, Minister for National Development on 5 November at MAX Atria @ Singapore EXPO.

(From left to right):

Aloysius Arlando, CEO, SingEx Holdings;  
Kenneth Er, CEO, National Parks Board, Singapore;  
Lawrence Wong, Minister for National Development, Singapore;  
Goh Eng Lam, Chairman, Landscape Industry Association of Singapore; and  
Damian Tang, Chairman, International Skyrise Greenery Conference Committee  
Chairman and President, Singapore Institute of Landscape Architects

Photo: © SingEx Exhibitions



Photo: © SingEx Exhibitions



Photo: © SingEx Exhibitions

### Inaugural GreenUrbanScape Asia Congress

A new conference titled 'GreenUrbanScape Asia Congress' was held for the first time at the exhibition. Held on 6 November 2016, the one-day conference provided a platform for industry players, professionals and even tertiary students to share their knowledge and skills on landscaping and greenery. Speakers of the Congress included more than 20 experts and renowned professionals from Singapore and overseas. Themed 'The Science of Greening the City in a Garden', the talks were divided into four main categories: 'Forensic Arboriculture', 'Playgrounds and Parks', 'Turf Management', and 'Urban Biodiversity'.

### International Skyrise Greenery Conference

Returning for the third time was the International Skyrise Greenery Conference. Themed 'Living Architecture – Engineering Sustainable Environments', the conference addressed the social, ecological and environmental issues and benefits of urban greening to tackle the effects of urbanisation on cities and their infrastructures.

Speakers included internationally acclaimed industry experts such as Argentinian award-winning architect Emilio Ambasz who is renowned for being one of the pioneers of green architecture and recognised for his outstanding design projects such as



(L-R) Mr Damian Tang, Director, National Parks Board, Singapore, Mr Adam Greenspan, Partner, PWP Landscape Architecture, USA and Mr Kai-Uwe Bergmann, Partner, BIG, Denmark addressed pertinent insights and trends during a panel discussion. Photo: © SingEx Exhibitions

the Fukuoka Prefectural International Hall in Japan; and Adam Greenspan from PWP Landscape Architecture, who is well known for integrating regenerative and sustainable principles in a wide range of projects, including public parks, campuses, mixed use developments and estates. One of his upcoming projects includes the Jewel Changi Airport in Singapore, a new retail and lifestyle complex that connects Changi Airport's three terminals.

### Skyrise Greenery Awards and Certified-LEAF developments

During the opening ceremony, Minister Wong presented accolades to 22 developments in Singapore for their efforts in greenery provision and ecologically friendly landscapes. This included 12 winners for the Skyrise Greenery Awards and 11 developments, which have been conferred the Landscape Excellence Assessment Framework (LEAF) certification.

Winners of the 2015 Skyrise Greenery Awards included Westgate, which bagged the Outstanding Award

for its 'mall in a garden' concept. SkyTerrace @ Dawson, an estate by the Housing & Development Board was the only development, which received both the award and the certification.

At the event, Minister Wong also launched a new publication titled 'Greening the Vertical Garden City'. It is published by NParks and the Urban Redevelopment Authority of Singapore, and authored by renowned landscape architect Mr Henry Steed. The book offers guidelines and case studies on the tasks and issues in greening our vertical spaces.

For more information on GreenUrbanScape Asia 2015, visit [www.GreenUrbanScapeasia.com](http://www.GreenUrbanScapeasia.com).

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## HDB projects win six awards for excellence in landscaping and greenery

**Singapore** – Five HDB developments have been conferred a total of six awards for landscaping and greenery by the National Parks Board (NParks), the biggest haul by any organisation thus far. The awards, which include the *Skyrise Greenery Award (SGA)* and five *Landscape Excellence Assessment Framework (LEAF)* certifications, recognise HDB's projects for bringing landscaping, greenery, environmental conservation and the encouragement of biodiversity to residents' doorsteps. Among the projects, SkyTerrace @ Dawson has been accorded both the SGA and LEAF certification.

The full list of developments which were conferred the awards is as follows:

### Skyrise Greenery Award

- SkyTerrace @ Dawson (Excellence Award)

### LEAF Certification

- Outstanding Award – Punggol Northshore District Landscape Masterplan (New development)
- Outstanding Award – Kampung Admiralty (New development)
- Skyline I & II @ Bukit Batok (New development)
- SkyVille @ Dawson (Existing development)
- SkyTerrace @ Dawson (Existing development)

The award-winning projects demonstrate HDB's efforts in providing residents with lush landscaped environments. For example, communal spaces such as roof gardens, sky terraces and precinct gardens enable residents to mingle and interact amidst ample greenery right at their doorstep. With linear parks and green corridors flanking some of the developments, residents can also enjoy green links to nature outdoors.

In addition, vertical greenery and rooftop greenery are also integrated into the design of the developments to soften the urban environment and provide visual relief for residents. Other environmentally sustainable features in the projects include bioswales and rain gardens that treat surface runoff and help to purify storm water before it is discharged into the surroundings. Where possible, trees are also conserved to retain the natural landscape character of the sites.

For the first time, HDB was conferred the *LEAF* certification (Outstanding Award) for its Punggol Northshore District Landscape Masterplan. Wholly planned and designed in-house by HDB's landscape architects, the landscape masterplan is an integral part of HDB's Biophilic Town Framework. This framework guides the design and planning of urban greenery so that nature can be better incorporated into the planning of the towns for residents' well-being.

HDB's Chief Executive Officer, Dr Cheong Koon Hean said: "We are encouraged that so many of our HDB developments have been recognised for excellence and innovation in greenery and landscape design. It is an affirmation of our efforts in creating well-designed homes and a quality living environment in an urban setting. As we design and build a new generation of public housing, we will continue to seek fresh ideas to bring nature to residents' doorstep. The public can look forward to more HDB projects in lush, green environments, including those in Bidadari, where the first batch of flats will be offered for sale this month."



SkyVille @ Dawson



Skyline I & II @ Bukit Batok



Kampung Admiralty



Punggol Northshore District Landscape Masterplan

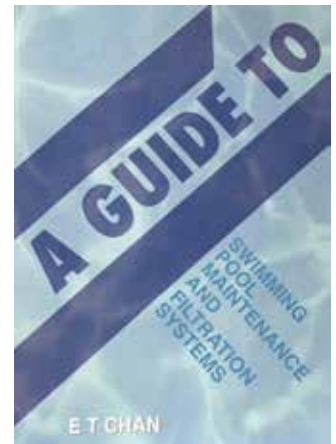


SkyTerrace @ Dawson

## Everything you need to know about swimming pools

**Singapore** – Swimming pools are one of the must-have features of any complex – they provide hours of enjoyment for patrons. However, the task of constructing and maintaining a swimming pool can be overwhelming. A new book written by a Singaporean pool industry veteran, Mr E.T. Chan, titled, “A Guide to Swimming Pool Maintenance and Filtration Systems” can help make all the difference when it comes to designing, building and maintaining swimming pools. The book draws on more than 30 years of Mr Chan’s personal experience in constructing and maintaining swimming pools and covers the fundamental principles of planning, design, maintenance and the operation of swimming pools. It is filled with a wealth of knowledge for industry professionals and includes diagrams, charts and illustrations to create an essential manual. Learn how to solve some of the most complex issues faced in the industry via many practical examples outlined in great detail throughout the book.

On 19 January 2016, Mr Chan will host an official book launch in Singapore, the event will bring together the industry’s most revered professionals to celebrate this invaluable tool for architects, engineers and pool maintenance technicians. The book is backed by Mr Yee Weng Phei, former Director of Facilities with the Singapore Sports Council, who wrote the book’s forward message describing it as the reference for industry by stating, “The book is very clear, concise and presented in a very comprehensible manner. It serves as an excellent guide book for professionals involved in swimming pool designing, construction and maintenance.” Mr Yee Weng Phei has been honoured as a pioneer of sport for his contributions to the Master Plan for sports facilities in Singapore.

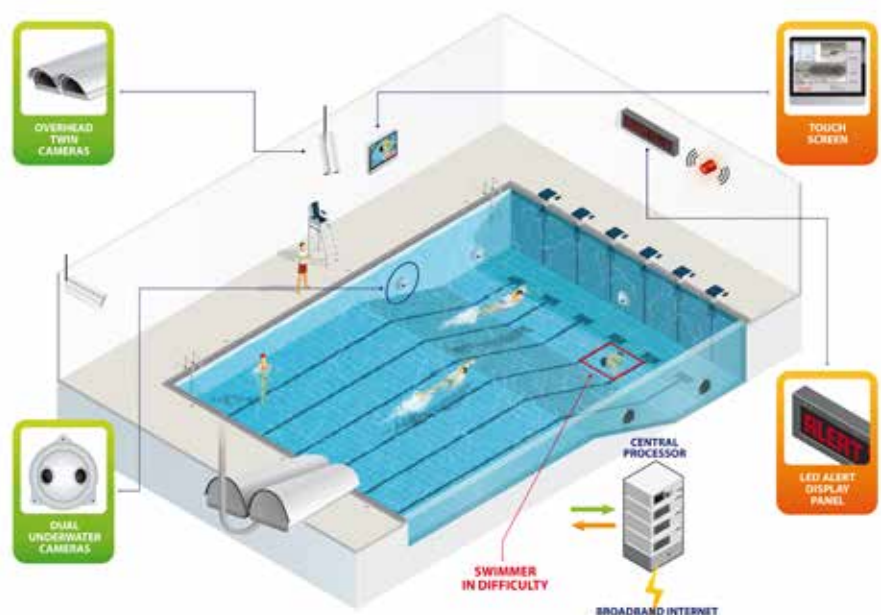


An example of an innovative real life computer vision drowning detection (Photo courtesy of Poseidon drowning detection system. Waterland Services Pte Ltd is Poseidon’s preferred solution partner for the system in Singapore).

Not only does the book focus on the lessons of the past, but it also looks toward the future of swimming pool technology. This point is exemplified by the chapter featuring new and unique technology for prevention of drowning. Such systems can detect a swimmer when a drowning incident occurs, often significantly quicker than lifeguards are able to: life guard detect only 16 percent of people within 15 seconds of drowning, whereas computer vision can improve this up to more than 80 percent.

As Mr Yee Weng Phei wrote in the forward about this book, “This ‘reference’ book is thus, timely and invaluable in serving its purpose.” If you are in the swimming pool industry, this book is a must have.

To find out more about E.T. Chan’s *A Guide to Swimming Pool Maintenance and Filtration Systems*, please email the author Mr E. T. Chan at [chanengteck@yahoo.com](mailto:chanengteck@yahoo.com).



Overview of the Poseidon Drowning Detection System.

## Hong Kong Science Park Phase 3 awarded final platinum rating by BEAM Plus

**Hong Kong** – Hong Kong Science and Technology Parks Corporation (“HKSTP”) has announced that Hong Kong Science Park Phase 3 (“Phase 3”), HKSTP’s newest facility dedicated to nurturing smart city related technologies, has been recognised again for its excellence in sustainable architectural design. Building 15W in Hong Kong Science Park Phase 3 has garnered Final Platinum rating under Building Environmental Assessment Method (“BEAM Plus”) V1.1 Final Assessment for New Buildings, at the highest score to-date among all accredited BEAM Plus Final Platinum projects.

Championed by the Hong Kong Green Building Council Limited, BEAM ratings are among the most esteemed sustainability recognitions for the building industry. The BEAM Plus New Buildings V1.1 assesses and rates buildings on its site, materials, energy and water use, indoor environmental quality, as well as innovations and additions. As one of the first completed buildings of Phase 3 and offering more than 159,000 square feet of R&D offices and laboratory space, Building 15W has scored the highest average ever in the Final Assessment.

Designed with the principles of “reduction, efficiency and generation” in mind, all buildings in Phase 3 embrace the latest green technologies and cost-effective energy-saving measures, making it the largest applications of green technologies in Hong Kong. As Hong Kong prepares for its transformation into a smart city – one of the most significant global technology megatrends impacting today’s world-class cities – Phase 3 serves as a showcase of low-carbon, energy-efficient technologies and sustainable building practices that can be applied to smart cities. Smart City is one of HKSTP’s three over-arching cross-disciplinary platforms for focused development, alongside with Robotics and Healthy Ageing.

“HKSTP is dedicated to supporting home-grown technological innovations, thus helping to foster the growth of advanced and environment-conscious manufacturing in Hong Kong,” said Allen Ma, CEO of HKSTP. “We have acted upon our commitment to a sustainable future by striving to develop a low-carbon and energy-efficient hub that facilitates the development of sustainable and innovative technologies,” he added.



**Building 15W in Hong Kong Science Park Phase 3 has garnered Final Platinum rating under Building Environmental Assessment Method (“BEAM Plus”) New Buildings V1.1 Final Assessment, the highest rating accredited by Hong Kong Green Building Council Limited (HKGBC) for its perfect integration of green technology and energy-efficient building design. This reinforced HKSTP’s effort in embracing sustainability and driving Hong Kong for its transformation into a smart city. Photo: © The Hong Kong Science and Technology Parks Corporation**

## NIPSEA Group unveils “Trend Beyond Colours” 2016/17

**Singapore** – NIPSEA Group, one of the leading paint and coatings manufacturer in Asia with Nippon Paint products in 15 Asian countries, has launched its second “Trend Beyond Colours”, unveiling nine key colour palettes featured across three inspirational themes; “We Are One”, “New Eco” and “Wonder-Lust.” The nine colours are forecasted to drive utilisation across various industries and applications in 2016 and 2017.

The nine trend colours were curated and handpicked by more than 50 design professionals, colour experts and enthusiasts from all over the Asia Pacific Region, including Malaysia, Singapore, China, India, Hong Kong, Thailand, Taiwan, Philippines and Japan, held at the Asia Pacific ChromaZone Colour Forecasting Workshop 2015 in Japan earlier this year. The workshop was organised by Colour Marketing Group (CMG), the leading authority in identifying, understanding and forecasting colour trends, in collaboration with NIPSEA Group. It is the only convergence of Asian professionals to create an Asian Palette specifically for the region, and the

forecasted colours form an important reference point that influences colours used across a wide range of industries from automotive, fashion to electronic gadgets as well as for architectural and interior spaces.

“We study and analyse the effects of colours and how behaviour is influenced by colours in Asia to capture the region’s essence,” said Wee Siew Kim, Group CEO of NIPSEA. “We translate these into nine colours under three themes. We want to make it easier for our consumers to develop their own stories in the future,” added Siew Kim.

Understanding that colours can enliven the environment and mood around us, NIPSEA Group has unveiled three colour themes - “We Are One”, “New Eco” and “Wonder-Lust”. Each theme features three unique colours, allowing consumers to explore and express their imagination.

Trend Beyond Colours 2016/17 is available for download online. **To download or to read it online, visit [www.nipponpaint.com.sg/colours/trend-beyond-colours](http://www.nipponpaint.com.sg/colours/trend-beyond-colours).**

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## Dominique Perrault receives the Praemium Imperiale 2015 in Tokyo

**Paris, France** – Dominique Perrault of Dominique Perrault Architecture officially received The Praemium Imperiale 2015 prize for architecture. The formal ceremony was held in Tokyo on 21st October 2015 in the presence of Princess Hitachi.

The Praemium Imperiale is an international art prize awarded since 1989 by the imperial family of Japan on behalf of the Japan Art Association in the fields of painting, sculpture, architecture, music and theatre/film. The prize is awarded for outstanding contributions to the development, promotion and progress of the arts and is often considered one of the most prestigious art prize in the world.

“The Praemium Imperiale has a very, very important meaning to all artists and creators across the world, for it is a profoundly cultural awards. It is not a commercial award. It is a prize that pays tribute to works, therefore to authors, to writings, to sensibilities that are extremely varied and are involved in all artistic fields. For me, it is a very strong signal – from a symbolic point of view, of course, but also from the point of view that it encourages to keep on developing the widening of the architectural discipline, that is to say of the architectural field. Architecture, as we have said, and as many agree today, cannot be summed up to the construction of buildings,” said Dominique Perrault to Nobutoshi Notsu, Executive Secretary of the Japan Art Association.



**Dominique Perrault (right) received the award from Princess Hitachi. Photo: © The Japan Art Association / The Sankei Shimbun**

## SPEECH architectural office (Russia) completes new apartment complex Actor Galaxy



**The new apartment complex Actor Galaxy. Photo by Alexey Naroditskiy.**

**Moscow, Russia** – SPEECH architectural office (Russia) has completed ‘Actor Galaxy’, a 26-storey storey apartment complex in Sochi.

The building is situated in Sochi on the territory of the famous in Soviet times Actor health resort, occupying the upper terrace of the plot. The sharp drop in relief directly affected its architectural and compositional design: the layout of the building resembles an elongated drop, as if “flowing down” the slope. Its dynamism is amplified by the complex’s silhouette: it tapers towards the sea, so that Actor Galaxy lowers with each floor, creating a spectacular arc in the city’s skyline. The sculptural volume is emphasised by the terrace barriers running along the side facades, which the authors shaped in an undulating form. Interestingly, this “wave” is shifted from floor to floor, making the surface “active” and as though rippling from the warm sea breeze.

The resort theme is reinforced by the white

colour of the complex – by virtue of the dynamic form and the pointed “nose,” the snow-white volume distinctly stands out in the panorama of Sochi, resembling a cruise ship which is about to go out into the open sea.

The internal layout of the complex is developed around two atriums. The larger one is located in the interior of the “drop” – it has a sophisticated, angular shape and is covered with ETFE, and the smaller atrium has a triangular configuration and is located in the bow of the “ship”. The larger one is treated as the main public space of the complex where the panoramic elevators are located, and in the future this space will house shops, cafes, and art objects. During the day this space serves as a backdrop for the ever-changing play of light and shadows, and in the evening it is illuminated at different levels.



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## “MORE 4 YOU” in Amsterdam - ISE 2016 gets set for its biggest ever show

**Amsterdam, The Netherlands** – ISE 2016 will return to the Amsterdam RAI on 9-12 February 2016 for the 13th edition of the largest AV tradeshow in Europe. This year will see the show format expand to include a fourth day for the first time. With more show time comes the promise of even more visitors than the 59,000 attendees who flocked to see over 1,000 exhibitors at ISE 2015.

ISE 2016 will once again occupy the entire Amsterdam RAI – including halls 1-12, plus the Diamond Lounge and the new Amtrium building. The show floor has sold out, resulting in 43,000 square metres of exhibitions space – an increase of 11 percent on the 2015 edition. The increase in sold floor space at the show supports the decision to extend the exhibition to four days, as exhibitors look to embrace the development by maximising the networking and business opportunities.

ISE 2016 will attract professionals from every link in the systems integration value-chain, including manufacturers, distributors, dealers, contractors and consultants. The show is also a key event for end-users, from a range of industries, including education, sports, corporate facilities, hospitality and live events.

Professionals from over 150 countries will attend the show looking to network, pursue new business opportunities and see over 1,000 new product launches. The show floor will once again be split into themed areas covering Digital Signage, Residential Solutions, Unified Communications, Audio Solutions and Smart Building.

### Pre-show and at-show events

ISE is recognised for the high standard of its pre-show and at-show events. Prior to the Opening Panel Discussion and Opening Reception on 8 February 2016, visitors have an opportunity to attend the Audio Forum or the Smart Building Conference.

The Audio Forum, presented by one of ISE's media partners Connessioni, is returning to ISE 2016 as one of the pre-show events. The full-day event will include seminars hosted by qualified audio professionals. This year's theme is 'Theories, Technologies, Legends and Myths' about audio'. The keynote speaker is Donato Masci, an acoustic designer and consultant from Studio Sound Service in Italy.

The Smart Building Conference – a joint venture between ISE's co-owners InfoComm International and CEDIA – returns to Amsterdam on the eve of ISE 2016. As in previous years, the Smart Building Conference will stage a full-day's programme, including

expert speakers from across the smart building industry. It will be chaired by Bob Snyder, Editor in Chief of Channel Media Europe. Delegates can expect to discover key insights into emerging trends, energy savings, home automation solutions, as well as the best practice approaches needed to meet Smart Home and Smart Building design and efficiency objectives.

The second annual ISE Capital Summit, which takes place on 11 February, will bring together AV and IT industry entrepreneurs and executives with financial professionals and business experts from the world of investments, mergers, and acquisitions. The event will include a discussion co-moderated by John Bowen of MediaBridge Capital Advisors and John Stiernberg of Stiernberg Consulting, featuring leading European financial experts, equity funds and strategic investors. Neil MacTaggart of Media Asset Capital is the returning panellist and gadfly for the event.

The Sport Venue Integration Summit will also be held on 11 February. SVG Europe, in conjunction with RH Consulting, will explore a day in the life of the contemporary connected stadium. Topics to be covered include new approaches to fan engagement, AV/IT integration, event preparation and temporary overlay.

Dr. Michio Kaku, one of the world's leading scientific figures, will give Friday's Closing Keynote. He is a recognised expert in Einstein's unified field theory and has unparalleled skill in predicting trends affecting business, commerce and finance based on the latest scientific research.

### New on the show floor

An exciting first for ISE 2016 is the Drone Arena. Hosted by Stampede Global, the new area will welcome leading drone manufacturers, and will deliver a programme of presentations and demonstrations. More details about the Drone Arena will be announced in the coming weeks.

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ISE 2016 will see the addition of a fourth Show Floor Theatre. The Audio Solutions Theatre (sponsored by The Music Group), joins the already established Residential Solutions, (sponsored by KNX); Commercial Solutions, (sponsored by KNX); and Unified Communications (sponsored by Crestron) Theatres.

The four Show Floor Theatres will provide a unique opportunity for attendees to hear industry experts, consultants and manufacturers present the latest in workflow solutions, case studies, technology innovation and business analysis in an innovative and intimate setting situated in the halls of the RAI. All sessions in the Show Floor Theatres are free to attend.

IT will continue to grow its prominence at the show. Research has shown that ISE is increasingly becoming a 'destination of choice' for IT professionals operating within the AV industry and for those looking to gain entry or secure partners within the international installation and integration marketplace. For IT vendors, IT professionals and the IT channel, ISE brings together the world's largest gathering of display and digital signage manufacturers and service suppliers, under one roof.

### Professional development

In addition to the Show Floor theatres, ISE's co-owners CEDIA and InfoComm International will present an even wider range of courses at ISE 2016. Both associations will offer more of their popular technical and business education, with offers in place for early bird discounts, as well as on-site certification, allowing attendees to gain globally recognised qualifications without leaving the show venue.

For more information, visit [www.iseurope.org](http://www.iseurope.org).

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## DoubleTree by Hilton Melbourne Hotel wins 2015 World Interior News Awards

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Photo: © M&L Hospitality

**London, UK** – The recently refurbished DoubleTree by Hilton Melbourne – Flinders Street has emerged as the winner of the 2015 World Interior News Awards (Hotels Category) at an exclusive awards ceremony at the Sky Garden, London.

With its uniquely Melbourne aesthetic and design elements inspired by the iconic neo-classical Flinders Street railway station, the M&L Hospitality-owned hotel beat 47 nominees including the much talked about 1 Hotel South Beach, Miami and captured the imagination of the highly-experienced panel of international design industry professionals.

The hotel's redevelopment project, completed in December 2014, involved a complete refit of the external façade, lobby, restaurant, 180 guest-rooms and bathrooms, and the public areas of all 12 levels. Driven by M&L Hospitality, the refurbishment was led by Michael McCann of interior design firm Dreamtime

Australia Design and Melbourne-based Melissa Chen of interior design firm Mill Interiors.

Forgoing a conventional hotel entrance, the external façade of DoubleTree by Hilton Melbourne echoes an industrial street vibe, featuring steel panels with differing profiles. The hotel rooms are a modern interpretation of grand train travel of the past. Victorian details of Flinders Street Station such as the subway tiles, simple typography, the conversion of train lines leading into a central location and bluestone laneways are all referenced throughout the rooms. Traditional elements of travel reminiscent of train carriages include vintage leather luggage in the drawer pulls and simple open wardrobes incorporated into guest rooms. The most striking design element is the use of the decorative detail of drapery within train carriages, which is translated into the 3D painted timber headboard.

## Qatar Green Building Council offers sustainability education

**Doha, Qatar** – The Qatar Green Building Council (QGBC) has launched a comprehensive professional training programme aimed at enhancing the quality of green building and sustainability education in Qatar and the region.

As a member of Qatar Foundation for Education, Science and Community Development (QF), QGBC aligns itself with QF's mission to foster a progressive society through education, and seeks to support the Qatar National Vision 2030 (QNV2030) to create a sustainability culture in industry and within the community.

The comprehensive training programme aimed at construction, green building and sustainability practitioners, is one way to help achieve this.

"QGBC strives to raise awareness about green building and environmental sustainability by offering standardised educational courses as we continue to work with our partners, in Qatar and around the world, to ensure that QGBC provides material that is on par with international standards," said Engineer Meshal Al Shamari, QGBC Director.

"The training programme caters to construction, green building and sustainability practitioners who seek



**Engineer Meshal Al Shamari, QGBC Director.**

to engage in interactive, debate-like development sessions with QGBC's leading experts," he added.

Meanwhile, since Qatar continues to undergo massive infrastructural development in preparation for 2022 FIFA World Cup, adherence to international sustainability standards and green building best practices remains at the top of national agenda.

QGBC's professional development training courses, offered as part of the programme, will provide participants with Continuing Education (CE) hours associated with several international educational partners.

The upcoming training programme will feature various modules including, Building Energy Modelling; LEED training and exam preparation course as LEED V4 Core Concepts for LEED Green Associates; the Designers Guide to Green Sustainable Material; LEED V4 Building Design and Construction for LEED accredited professional "AP" BD+C; and LEED V4 Interior Design and Construction for LEED AP ID+C, in addition to tailor made sector focused courses such as sustainability in facility management.

QGBC is a non-profit, membership-driven organisation dedicated to advocating green building solutions, leading industry research, and promoting sustainable practice in the community. QGBC offers membership opportunities to organisations, individuals and students who demonstrate support for the QNV 2030 and showcase passion for environmental sustainability.

**For more information about the upcoming courses, visit [www.qatargbc.org](http://www.qatargbc.org).**

## 4th Annual EGBC Congress offers practical insights on green urban environments to delegates



**4th Annual EGBC Congress - The Sustainable City tour and workshop.**



**Dubai, UAE** – The fourth Annual EGBC Congress, held under the patronage of His Excellency Dr. Abdullah Belhaif Al Nuaimi, UAE Minister of Public Works, concluded in Dubai with record participation of delegates representing all sectors of the construction industry supply chain.

Over the two days of the EGBC Congress, international and regional experts delivered keynote speeches, presented case studies and took part in panel discussions covering Climate, Well-being, Economy, Innovation and Policy within the green building sector.

Organised as a carbon-neutral event, under the theme, *'How do green buildings scale up? - Bridging the Gap between Green Buildings & Sustainable Cities,'* the Congress served as an engaging platform for information exchange and benchmarking industry best practices.

Saeed Al Abbar, Chairman of EmiratesGBC, said: "The fourth Annual EGBC Congress achieved its objective of promoting interactive discussions and creating a space for learning, networking and capacity building amongst multiple stakeholders. The detailed presentations and panel discussions provided the delegates an opportunity to share their experiences and benchmark best practices within the green building industry."

"The UAE is at the forefront of promoting green practices to create sustainable cities for the future, in line with the 'green economy for sustainable development' vision announced by His Highness Sheikh Mohammed bin Rashid Al Maktoum, UAE Vice President and Prime Minister and Ruler of Dubai. We are thankful to the Ministry of Public Works for its patronage and to all the experts, delegates, partners and sponsors for their support to the event. We will continue to focus on promoting industry-level discussions on green buildings, encouraging collaboration amongst all stakeholders to achieve a 'greener' environment for future generations," he added.

On the second and final day of the EGBC Congress, the delegates toured 'The Sustainable City,' Dubai's first fully sustainable community. A five million square feet project, it is envisaged to be a world-class example of what can be achieved through a commitment to sustainability. It features a wide range of initiatives to both conserve resources and save money, including energy efficient home design, use of eco-friendly building materials and solar panels placed on the roofs of residential units.

Diamond Developers presented the delegates an overview of 'The Sustainable City' which is being constructed around the three pillars of sustainability; social, environmental and economic. The tour was complemented by a workshop highlighting the role of various sectors in creating sustainable cities.

Faris Saeed, CEO of Diamond Developers, said: "We are thankful to EmiratesGBC for partnering with us for the EGBC Congress. It provided us the opportunity to showcase the latest developments of our integrated sustainable community, which we have designed with the objective of providing Dubai's citizens with sustainable options to enhance the quality of their lives. We have placed top priority on nature, green spaces, health, education and recreational activities for our residents, with an emphasis on enabling a sustainable lifestyle that is allied to a strong sense of community."

At the Congress, delegates were presented with the Arabic version of the *'Technical Guidelines for Retrofitting Existing Buildings,'* a set of instructions which highlights 31 retrofit methods that a building owner, operator, end-user can use to increase energy and water savings, improve occupant comfort and well-being and also facilitate operational efficiency and the longevity of the existing building stock in the UAE.

MyClimate Foundation, one of the world's leading providers of voluntary carbon offsetting measures, will offset the carbon generated by the Congress through its international project portfolio of gold standard certified projects.



Saeed Al Abbar, Chairman of Emirates Green Building Council.



HE Dr. Thani Ahmed Al-Zayoudi, UAE Permanent Representative to IRENA and Director of Energy and Climate Change, Ministry of Foreign Affairs

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## Jordan Green Building Council leads the way for green buildings

**Amman, Jordan** – The Jordan Green building Council is a not for profit nongovernmental organisation of which its main objective is spreading awareness on the importance of green buildings in all its stages. Jordan GBC is among 103 green building councils around the world, established as part of the Mena region in 2009 reporting to the ministry of environment and the ministry of social development and chairing the Mena Region. The Council's vision is to be recognised as the reference for the green building ecosystem in Jordan and the mission is to promote and advocate for the adoption of green building practices in all phases of the building process leading towards making the green building environment a widespread reality in Jordan.

The Council's objective is engaging the community in Jordan in the application of the green building concept shedding the light on the importance of adopting the mentioned concept seeing its effect not only on the environment yet on individual's well-being.

Jordan GBC operates according to three pillars, the first pillar being the Green Academy this part of the council is meant to provide the community with courses that empowers individuals with the information needed in order to obtain a green building.

The second pillar is the Outreach pillar, this section of the Council strives to reach the largest number of members of the society of different demographics creating events that attract



Board members and staff of the Jordan Green Building Council.

colourful backgrounds. Furthermore, the engagement of the society through providing volunteering opportunities and internships.

Last and most importantly the Membership pillar, to be considered the most integral stage of engaging the community, reaching out to the public through events tackling the needs of different target groups, in addition to one on one meetings held with interested members of the society guiding them through to their green goals.

## Dr John Keung conferred the WorldGBC Chairman's award

**Singapore** – The World Green Building Council (WorldGBC) has conferred its prestigious Chairman's Award 2015 on Dr John Keung, Chief Executive Officer of the Building and Construction Authority (BCA) Singapore, to honour his energy and passion in advancing the global sustainability movement.

Dr Keung was one of three recipients this year and the first recipient from Southeast Asia since the launch of the award



Dr John Keung (CEO of the BCA Singapore, centre) received the WorldGBC Chairman's Award from Mr Bruce Kerswill (Chairman of WorldGBC, right) and Ms Terri Wills (CEO of WorldGBC, left) at the WorldGBC Congress Gala Dinner 2015 held in Hong Kong on 29 October 2015. Photo: © Hong Kong Green Building Council at the occasion of WorldGBC Congress 2015 Hong Kong.

in 2011. He accepted the award at the WorldGBC Congress held in Hong Kong on 29 October 2015. He was nominated by the Singapore Green Building Council (SGBC), an established member of the WorldGBC since 2009, which has been working very closely with the BCA to green the local built environment through a variety of initiatives and programmes.

As CEO of BCA, Dr Keung spearheaded Singapore's green building movement with the launch of the nation's first Green Building Masterplan in 2006. Forming the backbone of the Masterplan was the BCA Green Mark scheme, which served as benchmark for evaluating environmental sustainability in buildings. The scheme has emerged as the leading green building rating system of the tropics and sub-tropics today. Under Dr Keung's leadership, the green building movement took off in Singapore, with the subsequent formulation of the second and third Green Building Masterplans.

"I am deeply humbled and honoured to receive this award. Our success would not have been possible without the commitment and close collaboration of the government, non-government organisations and industry stakeholders and the dedication and hard work of my colleagues in BCA. I dedicate this award to all my colleagues in BCA, our stakeholders and partners for their continuous support and invaluable contributions in creating a sustainable built environment. I would like to express sincere thanks to SGBC for the nomination, and WorldGBC for the award. I look forward to even closer collaborations with our stakeholders and partners for many years to come," said Dr John Keung.

## Ecosis commits to establishing an alliance to transform Port Louis, Mauritius

**Mauritius** – At the recent Annual General Meeting of the Clinton Global Initiative in New York City hosted by President Bill Clinton and Clinton Foundation Vice Chair Chelsea Clinton, a commitment was made to launch a multi-stakeholder Alliance to transform Port Louis, the capital city and economic hub of Mauritius.

This commitment to turn a troubled urban hub into a successful model of responsible, sustainable development was announced at the Clinton Global Initiative (CGI), a forum driven by the Clinton Foundation that convenes global leaders to create and implement innovative solutions to the world's most pressing challenges.

Advocating the Port Louis City Alliance was Mr Tony Lee Luen Len of Ecosis, a Mauritian consulting firm specialising in sustainable development and social impact strategy. Mr Lee Luen Len is also the Founding Chairman of the Green Building Council of Mauritius.

Several partners have already been rallied to work on this initiative including UN Habitat, UNDP Non State Local Actor, Green Building Council of Mauritius, Caritas, SOS Patrimoine, Global Creative Leadership Initiative and World Economic Forum Global Shapers.

Mr Lee Luen Len participated in the sessions, and presented Ecosis's commitment for a new governance model to drive a multi-stakeholder and cross-sector collaborative platform (with its own constitution) to regenerate the country's capital city that's already home to 12 percent of the country's population, and 30 percent of its urban population.



Mr Tony Lee Luen Len

### Background

Port Louis is currently faced with a host of economic, environmental and local political challenges. And with the threats posed by increased urbanization and climate change, a collaborative, caring, visionary and inclusive approach to tackling these challenges is becoming ever more critical.

Mauritius, a SIDS (Small Island Developing State) is particularly vulnerable to climate change impacts - such as rising of sea level threatening land erosion and submersion and increased intensity of storms, drought and rainfalls - leading to life risking situations for people having inadequate infrastructure or living in vulnerable areas.

Also, unplanned and uncontrolled growth of population within the urban areas is creating intense competition for land use and services, especially in SIDS countries - which are already limited in terms of their land resources.

There have been attempts in the past to address a number of these issues, but for a host of systemic reasons these projects either stalled at the design or implementation stage, or were simply shelved.

A big problem has always been the lack of multi-stakeholder consultation and engagement in projects, and the absence of collaboration between different sectors.

The public sector is often seen as fragmented, making developmental shortfalls more visible and implementation more difficult due to policymaking inaction. Another major stumbling block is the fact that mayors only serve a single year term, which means that longer-term bigger-vision projects typically get becalmed by a lack of continuity, collaboration, political will, foresight and the loss of institutional knowledge.

The proposed Port Louis City Alliance intends to turn this around by forming a public, private and civil society partnership to assess, plan and address these challenges and pave the way for success.

### Containing urbanisation

Port Louis already has the highest poverty rate, and with unchecked urbanisation and desperation, this figure is rising monthly. Inhabitants are being driven to develop informal settlements/slums in vulnerable areas (flood plains, mountain slopes), and a number of areas are experiencing the inadequate delivery of basic services. In addition, cultural heritage sites and public spaces are being destroyed and greenhouse gas (GHG) emissions are on the rise.

### A new ecosystem

The methodology being proposed by Ecosis is a simple framework for multi sector collaboration to successfully address the challenges the City faces. It does not specifically provide solutions to specific problems, but is proposing *a new ecosystem based on a public, private, people partnership*.

It will place the citizen at the centre of the strategy to ensure that views of the local citizens are represented in the decision-making, hence ensuring the acceptability of the project as well as an increase in the pace of development.

"City scale problems should not be dealt with in an emotional, chaotic, political and piecemeal fashion – which we all agree is our typical approach," said Mr Lee Luen Len. "Ecosis is committing to set up the Port Louis City Alliance to tackle the complex problems collaboratively - in an integrated manner – with accelerated decision making and solution delivery," added Mr Lee Luen Len.

### About Ecosis

Ecosis is a firm of sustainability consultants and social impact strategists. It was founded in 2006 in Mauritius with a mission to "co-create a sustainable and happy world by managing sustainable solutions and strategies smartly from inception to completion." The firm specialised in sustainability in the built environment and energy fields, but over the years have developed expertise in social impact and partnerships. **For more information, visit [www.ecosisltd.com](http://www.ecosisltd.com).**

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# Shenzen Bao'an International Airport, Terminal 3



Photo: © Leonardo Finotti

The concept of the plan for Terminal 3 of Shenzhen Bao'an international airport by architects Massimiliano and Doriana Fuksas evokes the image of a manta ray, a fish that breathes and changes its own shape, undergoes variations, turns into a bird to celebrate the emotion and fantasy of a flight.

The structure of Terminal 3 (T3) – an approximately 1.5-kilometres-long tunnel – seems to be modeled by the wind and is reminiscent of the image of an organic-shaped sculpture. The profile of the roofing is characterised by variations in height alluding to the natural landscape.

The symbolic element of the plan is the internal and external double “skin” honeycomb motif that wraps up the structure. Through its double-layering, the “skin” allows natural light in, thus creating light effects within the internal spaces. The cladding is made of alveolus-shaped metal and glass panels of different size that can be partially opened.



Architects Massimiliano and Doriana Fuksas. Photo: © Fabio Lovino



Photo: © Leonardo Finotti

The passengers accede to the terminal from the entrance situated under the large T3 "tail". The wide terminal bay is characterised by white conical supporting columns rising up to touch the roofing like the inside of a cathedral. On the ground floor, the terminal square allows access to the luggage, departures and arrivals areas as well as coffee houses and restaurants, offices and business facilities. The departures room houses the check-in desks, the airlines info-points and several help-desks. The double and triple height spaces of the departures room establish a visual connection between the internal levels and create a passage for natural light. After checking in, the national and international passengers' flows spread out vertically for departures.

The concourse is the airport key-area and is made up of three levels. Each level is dedicated to three independent functions: departures, arrivals and services. Its tubular shape chases the idea of motion. The "cross" is the intersection point where the three levels of the concourse are vertically connected to create full-height voids which allow natural light to filter from the highest level down to the waiting room set in the node on level 0. The honeycomb motif is transferred and replicated on the interior design.

Shop boxes, facing one another, reproduce the alveolus design on a larger scale and recur in different articulations along the concourse.



Photo: © Archivio Fuksas



Photo: © Archivio Fuksas



Photo : © Archivio Fuksas



Photo : © Archivio Fuksas



Photo : © Leonardo Finotti



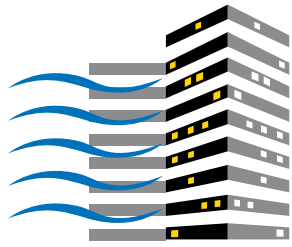
Photo : © Leonardo Finotti

The interiors designed by Fuksas – placed in the internet-point, check-in, security-check, gates and passport-check areas – have a sober profile and a stainless steel finish that reflects and multiplies the honeycomb motif of the internal “skin”.

Sculpture-shaped objects – big stylised white trees – have been designed for air conditioning all along the terminal and the concourse, replicating the planning of amorphous forms inspired by nature. This is also the case for the baggage-claim and info-point “islands”.

#### PROJECT DATA

**Project:** Shenzhen Bao'an International Airport, Terminal 3  
**Location:** Bao'an District, Shenzhen, Guangdong, China  
**Client:** Shenzhen Airport (Group) Co., Ltd.  
**Developer:** Shenzhen Planning Bureau; Shenzhen Airport (Group) Co., Ltd.  
**Architects:** Massimiliano and Doriana Fuksas  
**Program:** Airport Expansion Terminal 3  
**Area:** 500,000 square metres  
**Cost:** 734,000,000 Euros  
**Period:** 2008-2013  
 International competition won 2008  
 Building site: 2009  
 Inauguration: November 28, 2013



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## New integrated hub opens in Joo Koon



The new Joo Koon ITH.

Construction on the new Joo Koon Integrated Transport Hub (ITH) has completed after two and a half years. The Hub opened to the public on 21 November 2015 and is designed to improve connectivity between the Joo Koon bus interchange and MRT Station for commuters who live or work Jurong and Tuas areas.

The fully-air-conditioned Joo Koon ITH, designed by ADDP Architects LLP with inputs from LTA, is the eight ITH in Singapore. As its name implies, the Hub integrates the bus interchange and MRT station with adjoining commercial developments. The ITH hub brings added convenience to commuters as they can run errands at shops located at the hub as part of their bus or train journeys.



Concourse



Concourse



PSO



Alighting berths



Bus park area

The façade of the ITH is designed to improve and modernise the development's public face. It is composed of aluminium cladding and glass curtain wall. The bus interchange takes up one storey and is integrated into a 16-storey single-user warehouse development comprising of a seven-storey warehouse with automatic storage & retrieval system, ancillary office & commercial uses. The public transport system is well integrated and linked under one roof.

The existing Joo Koon MRT station is linked to Fairprice Hub via the second storey covered link bridge where commuters can take the lifts and escalator to the air-conditioned bus interchange at first storey.

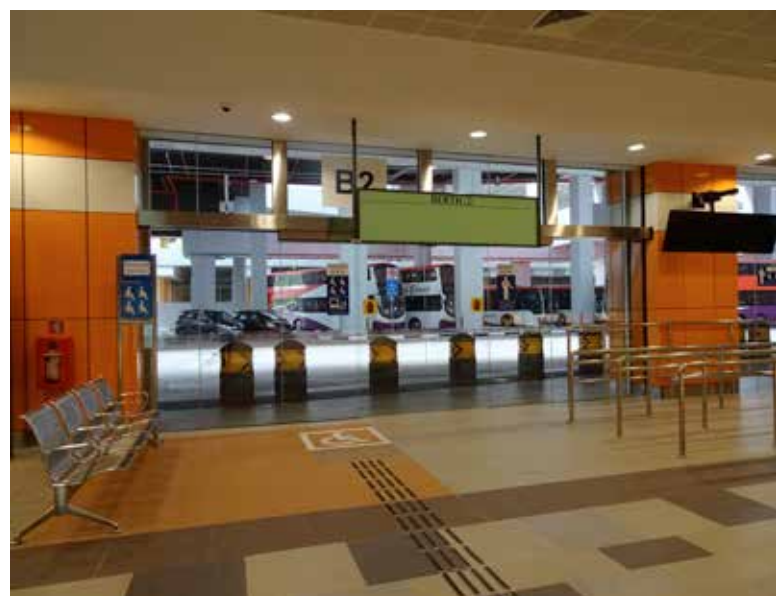
The Joo Koon ITH offers a host of amenities and is designed to be community-friendly. Equipped with barrier-free facilities, the Joo Koon ITH has dedicated boarding points and graduated kerb edges to facilitate boarding of commuters in wheelchair.

The design of the concourse area has been enhanced to feature priority queues with seats for the elderly and disabled. This is part of Land Transport Authority's efforts to create a more senior-friendly public transport system. The ITH will also feature 40 bicycle lots for commuters who cycle to the ITH from their home or workplace.

*All photos: © Land Transport Authority*



Bus park area



Priority queue area at berth 2.



# New passenger terminal opens at Prince Mohammad Bin Abdulaziz International Airport





**P**rince Mohammad Bin Abdulaziz International Airport or Madinah Airport, a regional airport in Madinah, Saudi Arabia, opened a new, state-of-the-art passenger terminal on 2nd July 2015.

Cumhur Kaur, TAV Construction Deputy Managing Director in Saudi Arabia and Africa, said TAV Airports signed a contract with GACA, the Civil Aviation Authority of Saudi Arabia, together with Al Rajhi and Saudi Oger for the build-operate-transfer project of the Madinah Airport, the first airport privatization of Saudi Arabia. TIBAH Consortium, which started to operate Madinah Airport in June 30th, 2012, completed the construction of a state-of-the-art passenger terminal in 31 months before the official completion date given in the contract, which is available for expansion and to provide service to all sizes of aircraft from all around the world.

The terminal was put into operation on 2nd July 2015 by an opening ceremony attended by the King of Saudi Arabia. Mr Kaur stated that the capacity of Madinah Airport will be increased to 8 million passengers per year from the existing capacity of 5.7 million passengers in 2014, through the construction of a new terminal building, apron and fast exit roads, after which capacity will be further increased to 16 million passengers per year prior to the expiry of the concession period. The Consortium has the operation rights of Madinah Airport for 25 years.

TAV and its partners, Al Rajhi Group and Saudi Oger, won the tender held



#### PROJECT DATA

**Project:** Prince Mohammad Bin Abdulaziz International Airport

**Location:** Madinah, Saudi Arabia

**Architectural Design:** GMW

**Structural Design:** URS, Çakıt, OSM

**Mechanical Design:** URS, Moskay

**Electrical Design:** URS, HB Teknik

**Landside Civil Engineering:** Khatip and Alami, Sigal

**Airside Side Civil Engineering:** URS

**Fire Engineering:** Etik

**Landscape Design:** DS

**Architectural Lighting:** Ukon

**Leed Consultant:** Oger International

**Area:** 153,000 square metres

**Passenger boarding bridges:** 32

**Official opening:** 2nd July 2015

in June 2012 for the operating rights of Madinah Airport and started construction of the new terminal immediately. The 153,000 square metres terminal building has 32 passenger boarding bridges. As part of the contract, TAV constructed 26 auxiliary buildings, 2 runways, 3 parallel taxi ways besides the terminal building.

Designed by GMW London and Istanbul offices, the palm tree is the main source of inspiration for the design of the new terminal. Dicle Demircioğlu and Pinar Ilki, Partners of GMW Mimarlik, tell us more about the design.



Dicle Demircioğlu (left) and Pinar Ilki, Partners of GMW Mimarlik



Cumhur Kaur, TAV Construction Deputy Managing Director in Saudi Arabia and Africa

#### Q: What type of design does the airport have?

> GMW's approach recognises the airport terminal building complexity both in terms of functionality and their technical content; it reconciles the needs and expectations of the various stakeholders including the operators, the airlines and passengers. The design approach was also be informed by a thorough research and understanding of well established and emerging demands and of the most up to date technologies. GMW therefore aimed to ensure that the design offers a great passenger experience, takes full account of the operators' requirements; security and safety, operational efficiency, presents flexibility and adaptability for the future, creates comfortable and stimulating environment and proves to be a commercial success.

#### Q: What is the inspiration behind the design of the airport?

> The palm tree is main source of inspiration for the architectural forms that GMW used in their design of the terminal building and associated buildings/structures. Madinah is a holy place and, its gateway must be appropriate to both its international and national religious and cultural significance. It must treat all passengers and pilgrims with a quality experience throughout the year. It must speak of Islam, the nation of Saudi Arabia, the specific qualities of the Hijaz region and revered city of Madinah. As such, the terminal is a structure designed to speak of quality, equality, its place as a key gateway, and as a sanctuary in the desert landscape. The "Grand Palm Canopy" design of GMW is the focus of the architecture and, as such, evokes emotion from both the road and the air.

The terminal is dominated by the "Grand Palm Canopy", a delicate structure that forms a palm grove in the desert, a place of respite and of sanctuary for travelers before moving onto their flight or land. The palm structures themselves are modular and standardized. Their scale, proportions and repetition provides large spans of 27x27 metres incorporating 18x18 metres steel palm tree with 9 metres wide tartan grid arrangement. The palm trees are lit naturally from above through roof lights set within the intersection of the tartan grid and artificially from below to enact a feeling of elegance and of serenity within the desert surroundings. Each palm structure is designed to offer itself as an aesthetic object, merging with the other palm structures to create long, soaring vaulted spaces and cross-vistas along their diagonals.

#### Q: The airport is LEED certified. In what ways is the airport green?

> The terminal is the first outside the US to receive Green Building Council (USGBC) LEED GOLD certification. The certification consists in two main submittals, the Design Review and the Construction Review. The project implemented a few strategies considered to be Green Features & Measures under the LEED certification in order to achieve the desired rating for design review.

The followings are the headlines from these strategies:

- 1) On sustainable sites category; the site selection added points as project is on previously undeveloped land which is not a prime farmland. Public transportation and coach services for pilgrims are provided; sand traps, hydrocarbon filtration & oil separators are designed to treat rainwater before discharge and infiltration to the natural land. A certain percentage of parking spaces are shaded and roofing material both for the parking and the terminal are selected to reduce the heat island effect.
- 2) For water efficiency; plumbing fixtures are selected to reduce the water use, low-flush toilets and urinals also added points. Water efficient plantation and non-potable water and recycled content is used for landscaping.
- 3) In the energy and atmosphere category high-efficient HVAC system proven by the energy modeling, compliant refrigerants, sensors that reduce indoor lighting with increased daylight contributed to the points awards collected.

Regional materials are selected where possible to reduce the carbon footprint. GMW's design also met the criteria including the materials and resources, indoor environmental quality, and innovation in design.



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# Ben van Berkel / UNStudio's Kutaisi International Airport in Georgia completed



UNStudio's recently completed Kutaisi International Airport serves domestic and international flights for use by tourists, national politicians and international diplomats. The airport is destined to become a central hub, with up to one million travellers targeted in 2014-2015. Current figures for the airport show 30 flights per week, with an increase to 40 expected in Spring 2014, by which time direct flights from Western Europe to Kutaisi will also be possible.

UNStudio's design comprises the full airport development, including a revision of the runway, the master plan for the landscape and planned future development thereof, the terminal building, offices, a meteorological station and the air traffic control tower.

The architecture of the terminal refers to a gateway, in which a clear structural layout creates an all-encompassing and protective volume. Both the exterior corner detail – which functions as a crossing-point and point of recognition – and the so called 'umbrella' structure within the terminal building – which operates as a roundabout for passenger flows – operate as the two main architectural details around which all of the airport functions are organised.

The umbrella further guarantees views from the terminal plaza to the apron and to the Caucasus on the horizon and vice versa. The central point in the umbrella is an exterior patio, which is used for departing passengers. The transparent space around this central area is designed to ensure that flows of passengers are smooth and that departure and arrival flows do not coincide.

Ben van Berkel commented: "The design for the new airport embraces the traveller by embodying the circumstance of the site. Moments of both leaving and returning are celebrated by the large span, open spaces and high ceiling of the terminal structure – reflecting the ways in which such gestures were employed in the great railway stations of the past."

The design organises the logistical processes, provides optimal security and ensures that





the traveller has sufficient space to circulate comfortably. Serving as a lobby to Georgia, the terminal will in addition operate as a café and art gallery, displaying works by young Georgian artists and thereby presenting a further identifier of contemporary Georgian culture.

The 55-metres high Air Traffic Control Tower and its supporting office/operational building is designed to complement the design of the terminal. The tower's strong appearance makes it a beacon of the airport and surrounding area. The traffic control cabin on the top level forms the focal point of the tower, with a 360 degrees view on the surrounding landscape. A spacious and comfortable interior ensures a workspace for 4-8 operators with optimal concentration. The exterior of the tower is clad with a perforated skin on a concrete core to use wind for ventilation purposes. LED Light in-between the skin and the core enhance the beacon effect of the tower at dusk and dawn by changing colour whenever there is a fluctuation in wind speed.

The design for the new airport incorporates numerous sustainable elements. A large onsite underground source of natural water provides the basis for the reduction of energy consumption through concrete core activation and use for sprinkler basins. The floors of both the terminal and the traffic control tower will utilise this water for maintaining a regulated temperature in the two volumes. In the terminal building cantilevered roofs provide sun shading on south and southwest zones. A hybrid low pressure ventilation system is integrated into the terminal's main structure and there is a grey water collection system in the floor underneath the terminal building. A future aim is to present Kutaisi airport as Georgia's first airport to incorporate a strict segregation of waste and establish a recycling system which could be further implemented into new and existing projects in Georgia.

The project was designed and constructed in two years, under lead consultancy of UNStudio, with the airport already having begun operations by September 2012. Both design and construction saw the involvement of numerous local and international companies, with openness and knowledge sharing proving to be essential to fulfilling the tight schedule. The steel structure of the terminal – produced and shipped from Hungary – recently won a European Steel Prize award.

All photos: © Nakanimamasakhlisi





Photographer: Egon Gade

## schmidt hammer lassen architects completes expansion of Copenhagen Airport Pier C

**2**8th October 2015 marked the official opening of the expansion of Pier C in Copenhagen Airport, becoming key for the airport's growth strategy for non-European and long-haul traffic, making room for the world's largest passenger airliner – the Airbus A380.

schmidt hammer lassen architects has designed the 6,300 square metres expansion which houses three new gates and lounges. It offers a new interpretation of the existing airport design, innovation of passenger flow and logistics, where the principle of 'nudging' has played an important role.

schmidt hammer lassen won the competition to design the expansion of Copenhagen Airport Pier C in 2013 in cooperation with consulting engineers MOE. To create the best possible environment for



Photographer: Egon Gade



Photographer: Egon Gade



Photographer: Egon Gade

servicing of the planes it required a building with minimum pillars and very large spans.

“We have challenged the traditional gate design by designing the building in a butterfly shape. The black rectangular two-storey building has cut-ins in both sides, which leaves room for the aircrafts to gate very close to the building’s windows,” said Partner John Lassen, Schmidt Hammer Lassen.

At the end of the building there is a gate with two jet bridges to operate the Airbus A380 aircraft. The facade is in black with black trapezoidal plates that also runs past the windows creating a gentle light inside the lounge. The cut-ins and jet bridges stand as a contrast in white.

Inside, a “gate boarding” concept has been established for additional capacity and service allowing gate and lounge areas to merge, which not only save time and reduce walking area, it also provides passengers a better experience. “The black exterior embraces the light interior, where one moves like on a cloud with white marble floors and a light, calm, rational and typical Scandinavian décor. We have created a subdued, contemplative mood, so you can relax before a long haul flight,” said project architect Mads Engel, schmidt hammer lassen.

The calm atmosphere is further highlighted in the arrangement of seating, where on the basis of ‘nudging’ principles seating is divided in small groups, luring the passengers to take use of the whole lounge area. “As an example, the classic Arne Jacobsen design chairs are only upholstered in the areas along the walls, and different zones are designed

with family furniture or high standing workstations,” said Architect Nanna Wohlfeldt, schmidt hammer lassen, who has worked in close collaboration with the client and furniture makers Fritz Hansen and Jönsson on the interior design.

The lighting is subtle except at the large windows in the cut-ins where daylight flows freely allowing a dramatic view to the aircrafts standing with the bow up close. The grand circular lights are the building’s DNA defining the spatial waiting area and draws reference to the original airport design in Terminal 2.

schmidt hammer lassen has experience in the design of airport construction from, among others Oslo Gardermoen Airport in Norway and Aalborg Airport terminal building in 2001, which has since been extended twice, based on the practice’s terminal design.



Photographer: Egon Gade

#### PROJECT DATA

**Project:** Pier C in Copenhagen Airport

**Location:** Kastrup, Tårnby

**Architect:** schmidt hammer lassen architects

**Consulting Engineers:** MOE A/S

**Client:** Copenhagen Airports A/S

**Area:** 6,300 square metres

**Competition:** Winner of tender competition, 2013

**Status:** Completed 2015

**Photographer:** Egon Gade

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# Siemens Sustainability Centre in London

In 2012 Siemens opened the Siemens Sustainability Center (also called "the Crystal") in London. The heart of the complex is the world's largest exhibition dedicated to sustainable urban development. The crystal-shaped building also serves as a conference centre, urban dialogue platform and technology and innovation centre all in one.



Cities are the growth drivers of our future. Half of the world's population already lives in cities, and the number of city dwellers is rapidly growing. But they also account for the biggest share of energy consumption, CO<sub>2</sub> emissions and environmental impact. In order to protect cities for future generations, we need to balance their overall environmental impact and make better use of finite resources. The good news is that many of the cutting-edge technologies required for this vision of the future are already available. But every individual can make a contribution through the choices we make every day.

To highlight the role of technologies in urban development, in 2012 Siemens opened the Siemens Sustainability Center (also called "the Crystal") in London, a sustainable cities initiative dedicated to exploring how we can create a better urban future.

The heart of the complex is the world's largest exhibition dedicated to sustainable urban development. The crystal-shaped building also serves as a conference centre, urban dialogue platform and technology and innovation centre all in one, bringing together political decision-makers, infrastructure experts and the general public in order to develop concepts for the future of cities and their infrastructures.

After a construction phase of about a year and a half, the Crystal brought an architectural highlight in the Royal Docks district of London. Designed by Wilkinson Eyre Architects, the building spans more than 6,500 square metres and is one of the world's greenest buildings,

achieving Outstanding BREEAM accreditation and Platinum LEED accreditation, very stringent standards for sustainable design and construction. The Crystal is an all-electric building that uses solar power and a ground source heat pump to generate its own energy. The building incorporates rainwater harvesting, black water treatment, solar heating and automated building management systems. The design of the building's structure provides additional insulation and takes energy efficiency to a new level.

The CO<sub>2</sub> emissions from the building are expected to be 23 kg per m<sup>2</sup>, more than 65 percent lower than comparable office buildings.

At the heart of the Crystal is an exhibition which showcases global trends and challenges, alongside existing technological solutions to build environmentally sustainable, livable and prosperous cities. Across 10 zones, the exhibition encourages visitors to change the way they think about their cities, now and for future generations. Through interactive exhibits, films, and animations one can explore a range of issues including city trends, urban planning, smart buildings, safety and security, energy, water, healthy life, environment, and mobility. Case studies from cities around the world share innovative ideas. The 'Future Life' theatre invites visitors to imagine how cities might look in 2050.

### Laying ceramics with Mapei products

Building such a high-standard complex required the use of professional and eco-sustainable products and cutting-edge technologies that Mapei was ready to offer: ceramic tiles were laid with the company's solutions in several areas of the complex.

Before laying ceramics, the screeds were built by using TOPCEM special normal-setting, quick-drying controlled-shrinkage hydraulic binder for screeds.

KERAQUICK quick-setting, deformable cementitious adhesive was used to bond ceramic tiles on the floors in the reception, the restaurant, the toilets and showers, and other areas of the building.



### PROJECT DATA

**Project:** Siemens Sustainability Centre,

**Location:** London (UK)

**Project/Architect:** Wilkinson Eyre Architects, London

**Period of Construction:** 2011-2012

**Period of the Intervention:**

April-July 2012

**Intervention by Mapei:** supplying products for laying ceramic tiles on walls and floors in several areas

**Client:** Siemens

**Contractor:** ISG, London

**Laying Company:** Corinthian Ceramics Ltd

**Works Direction:** Pringle Brandon

**Mapei Distributor:** Boydens

**Mapei Coordinator:** Simon Pashley (Mapei UK)



Above pictures: In the reception area and the restaurant ceramic tiles were laid on the floors using KERAQUICK cementitious adhesive.



**KERAQUICK** was also used to lay ceramic tiles on the toilettes' floors.



**KERAFLEX** cementitious adhesive was used to bond ceramic tiles on the toilettes' walls.



In all the involved areas the tile joints were grouted with **ULTRACOLOR PLUS**.

This is a high performance adhesive, with no vertical slip and extended open time. It features very low emission level of volatile organic compounds (certified as EMICODE EC1 R by GEV) and can contribute up to 4 points to obtain the LEED certification for sustainable buildings. KERAFLEX high-performance cementitious adhesive was chosen to lay the ceramic tiles on the walls of the toilettes and showers. This is again a product with very low emission level of VOC (certified as EC1 R), which can contribute up to 4 points to obtain the LEED certification.

All tile joints were grouted with ULTRACOLOR PLUS high-performance, anti-efflorescence, quick-setting and drying polymer-modified mortar with water-repellent DropEffect® and mould-resistant BioBlock® technology.

This is again a high-sustainability product, with very low emission level of VOC (certified as EC1) and able to contribute up to 4 points to the LEED certification.

For more information, e-mail [mapei@mapei.com.sg](mailto:mapei@mapei.com.sg).

Article source: *Realtà Mapei International* no. 50/2014

**Mapei Products**

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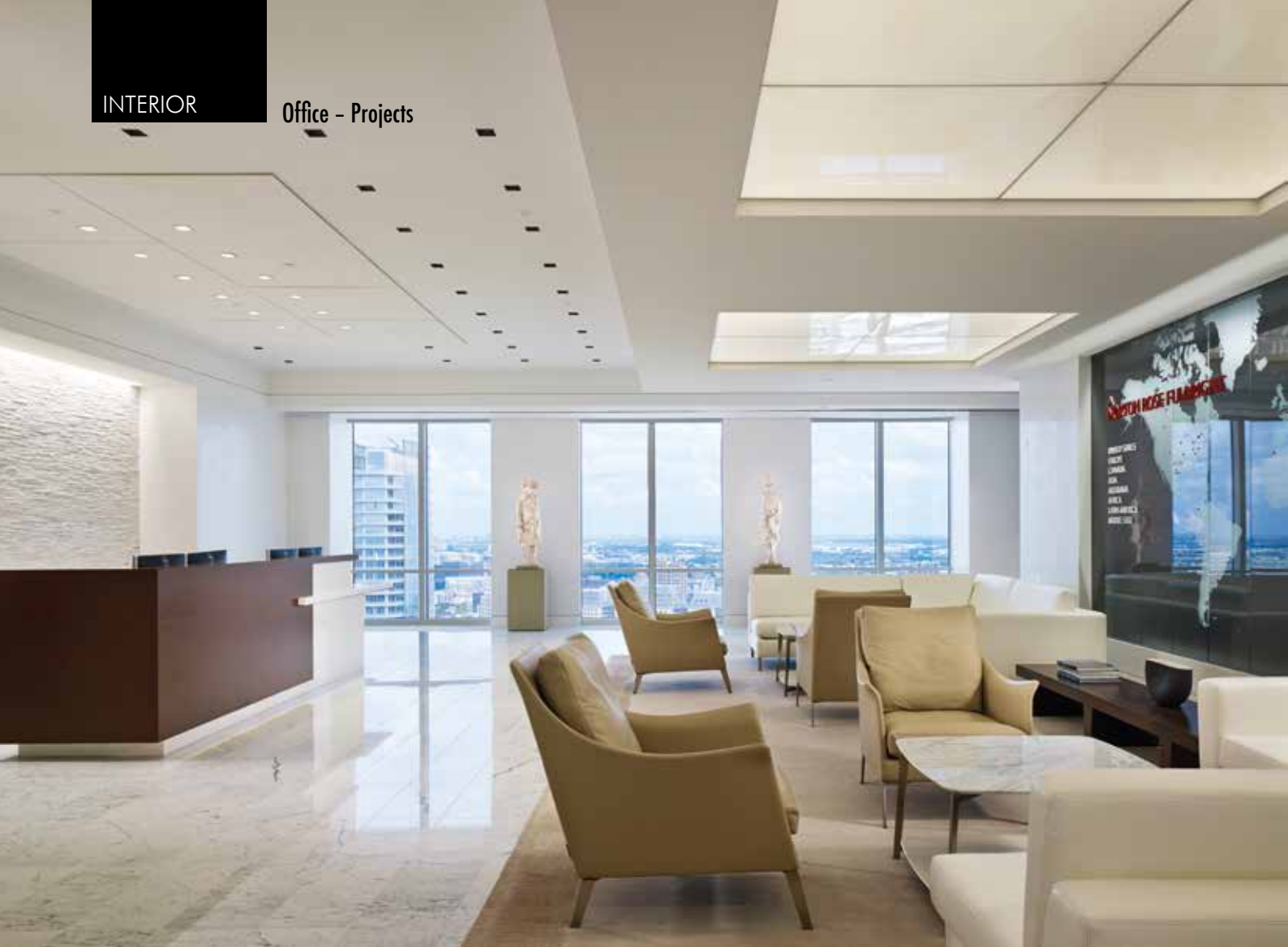


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## *Norton Rose Fulbright LLP's new office raises the bar*

Internationally-recognised law firm Norton Rose Fulbright has moved its North Texas office into four floors of Downtown Dallas' iconic Chase Tower. With the merger of internationally recognised law firms Norton Rose and Fulbright Jaworski, the newly joined organisation was in search of a place to accommodate their expected growth with first class amenities. Under the name Norton Rose Fulbright, the global firm looked to Staffelbach to design 120,000 square feet of collaborative and private space and guide the brand in a new





direction geared towards a younger demographic while preserving the firm's traditional roots.

"Norton Rose Fulbright's image as a global practice was the impetus for a great design concept," explained Jo Heinz, president and CEO of Staffelbach. "Our job was to emphasise the importance of their significant brand and to create a space that helps them continue their success," added Jo.

With its sleek and clean design, the upscale office features an impressive marble-clad entrance anchored by a combination of rosewood paneling harmonised in a light colour palette with pops of the brand's colours throughout the space.

The bright, airy lobby features an intricate etched glass map of the world pinpointing the firm's 50-plus locations across the globe, specifically naming the Dallas office.





The comprehensive topography of the globe was carefully etched into the glass – and from the Colorado Rockies to the Swiss Alps – the map's sophisticated detail encompasses the world's peaks as well.

The space includes a large cafe area with ample room for dining and relaxation. As a key addition to the office space, the Work Café offers sweeping views of Uptown Dallas and the Arts District for employees to enjoy during coffee and lunch breaks. A range of seating options – from high top bar stools to lounge furniture – is offered in the Work Café and coffee bars to accommodate different working preferences. The main reception floor also hosts a variety of conference rooms with sky wall features, various size meeting rooms and breakout areas for both clients, counselors and opposing counsel to utilise.

Designers focused on privacy throughout the rest of the office space and the design conveys the high integrity of the firm. To bring light into the core of the space, private offices feature story glass on the otherwise closed off offices that were designed to maintain confidentiality. Featured amenities on the employee floors include private huddle rooms, conference rooms, paralegal areas, heightened file and storage security, and upgraded secretary workstations.

*All photos: Nick Merrick © Hedrich Blessing*



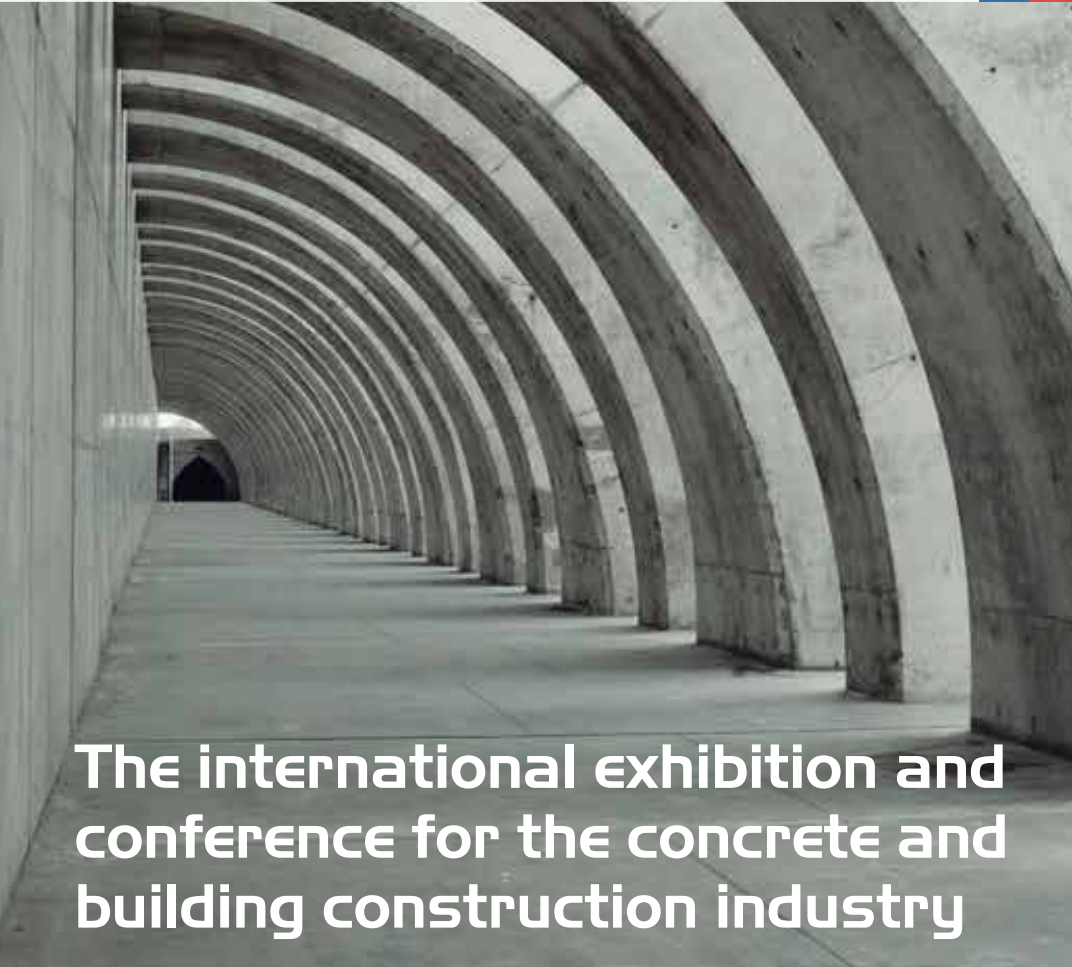


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# Axis Bank in New Delhi

The Axis Bank in New Delhi is cleverly designed by ARK Reza Kabul Architects Pvt. Ltd. to reflect the corporate theme of the company.

**T**he Axis Bank office at Gole Market in New Delhi, India, encompasses a total of 33,000 square feet over two floors. The contemporary functional design of the office follows the corporate theme of Axis Bank across both levels. The bank's friendly and trustworthy service to its clients is reflected in the warm earthy feel of the office interiors. A neutral palette of brown, yellow and white flanks the wood finish on the furniture and partition walls throughout the office.

The Axis bank is designed by ARK, an architecture, interior design and urban planning studio with three decades of proven expertise in project design and delivery ranging from residential and hospitality to master plans, townships, industrial, commercial, retail, institutional, and educational segments. Over the years, ARK has worked with Axis Bank on several branches and offices across India. One of the recently completed projects with Axis Bank includes Axis Bank Connect, their backhand office in Whitefield, Bangalore (India).

The central area on both levels is designed to accommodate employee workspaces. The neutral palette of the interiors is punctuated with green and purple partition boards, where the green acts as a spirit refresher, while the purple soothes the mind. The workspace accommodates a seating capacity of approximately 200 employees on each level. The four-foot-passageways adjoining the open workspace area add a sense of liberation to the space, and at the same time reflects the vastness of Axis Bank's operations.



**Architect Reza Kabul, Director,  
ARK Reza Kabul Architects Pvt. Ltd.**



**Conference room**



Chairman's cabin

The walls bordering the workspaces are lined with corporate Axis branding hosting cabins for senior staff members. These include the chairman and vice presidents of various departments such as FOREX, Retail Assets, Risk Management, Private Banking, Capital Holdings, and Human Resources also function together in the space. The chairman's cabin is designed with its designated space for the secretary as well as a private waiting room.

The board rooms and meeting rooms at Axis Bank have been designed to adapt with the need of the space. Foldable walls and loose furniture allow the spaces to be converted from smaller spaces for closed door meetings to larger spaces for employee training programs. The three conference rooms, each 200 square feet large, located on the first level of the bank come together to form a larger space of 600 square feet.



Main lift lobby



Workspace



Dining space

The collapsible walls neatly stack up on the sides, ensuring an unobstructed view of the entire space. The 170 square feet two meeting rooms located on the second level of the bank function similarly. The dining areas are designed for easy maintenance catering to the large number of employees. The green and red chairs increase the employee's communication and socialisation, and physical energy. The design also incorporates utility spaces flushed into the overall décor of the office; including a strong room, store room, server room, and AHU room. While the neutral palette of the space reflects the friendly yet professional attitude of Axis Bank, the bursts of vibrant colours add dynamism, thus ensuring employee productivity.

#### PROJECT DATA

**Project:** Axis Bank  
**Location:** Gole Market, New Delhi, India  
**Client:** Axis Bank  
**Interior Design Firm:** ARK Reza Kabul Architects Pvt. Ltd.  
**Scope:** Interiors  
**Type:** Commercial  
**Size:** 33,000 square feet  
**Completion:** April 2015



Workspace

# Outdoor Fitness and Wellness

Text by Patrick Lee, Director,  
CT-ART Creation Pte Ltd.  
Photos courtesy of CT-ART  
Creation Pte Ltd.

Outdoor fitness facilities have become a regular feature at public spaces, public housing, condominiums, sports halls, dormitories and schools. Planning such facilities close to playgrounds enhances a 3-G effect; also known as Three-Generational Recreation Area. Exercising is like play to most adults; parents, grandparents, child guardians can exercise/play while children play at playgrounds within the watchful eye of their guardians. It is good practice to have different equipment for senior citizens and adults.

Fitness equipment for adults should allow users to build body strength; upper body, abdominal and leg strengths form the major parts of the body. Fitness equipment for children should be designed for users to build body strength as with adults and should have elements of play and challenge for two users or more.

Senior wellness equipment should be appropriate for senior users, they could be 50 years or older and depending on their fitness levels, regular fitness equipment may be more appropriate for those with good fitness levels. They should be designed to improve sense of balance, build strength, enhance, flexibility and endurance. Wheel chair accessibility is important. Elderly wellness equipment should promote physical wellness for a better quality of life.

Exercise can become more inclusive, that is, allowing users of all abilities to play and enhance fitness at the same time by just having fun. For example, Playworld's Playfit Neos can engage everyone with modern design, blinking lights and sounds.

With modern technology, equipment such as Energi and Lifetrial from Playworld incorporates Tags for users to scan and view videos on how to use. Equipment instructions are pictorial and allows for up to three levels of advancement. Safety of equipment shall meet with local or international standards. Equipment should be easy to maintain and sustainable, program guide created by manufacturers who have researched into its equipment can build more community spirits.



ENERGI® from Playworld Systems.



NEOS® from Playworld Systems.

## About the author

Patrick Lee is a specialist on recreation equipment for more than 20 years. He is a playground safety inspector with the US and European standards, he attends many conferences on recreation facilities in the USA and he is updated on the latest safety requirements and trends.

For more information, contact CT-ART Creation Pte Ltd at tel (+65) 6762 9891, fax (+65) 6762 7980, email enquiry@ctart.com.sg or visit [www.ctart.com.sg](http://www.ctart.com.sg).

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# STANDING-STRONG BY KOMPAN

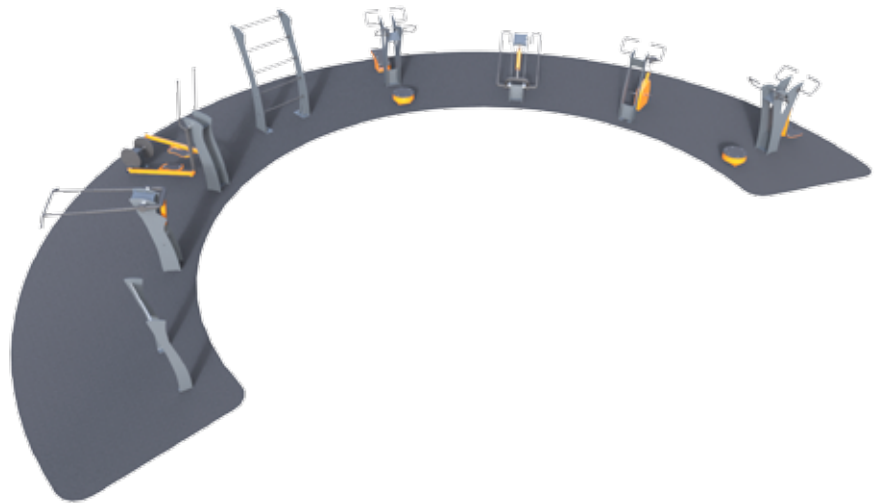
## – FITNESS AND FUN COMBINED!

**S**tanding-Strong by KOMPAN is claimed to be the first to develop fitness adjustable devices and a training method specifically for outdoor use. KOMPAN studied the specific design criteria that entailed outdoor training and translated these into a functional training circuit.

The equipment is designed and produced according the latest draft of the EN16630 safety regulation. Even novices can use them straight away, as every device has clear user instructions. Each device is used in a standing position and is designed

for multiple exercises. Users get the best possible work-out because it trains different muscle groups in one movement. When users exercise in an upright position it activates the muscles in the lowest part of your torso and achieve better 'core' stability. By using hydraulic technology to adjust the trainings resistance there is practically no risk of strain through overdoing it. These are the keys to long-term fitness.

For more information on Standing-Strong, contact Playpoint (Singapore) Pte Ltd at tel (+65) 6398 1558, fax (+65) 6398 1559, email [info@playpoint.com.sg](mailto:info@playpoint.com.sg) or visit [www.playpoint.asia](http://www.playpoint.asia).



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# Webnet Curtain Façade with Integrated Graphic Elements

Restoroute Rose de la Broye, Estavayer-le-Lac (Switzerland)



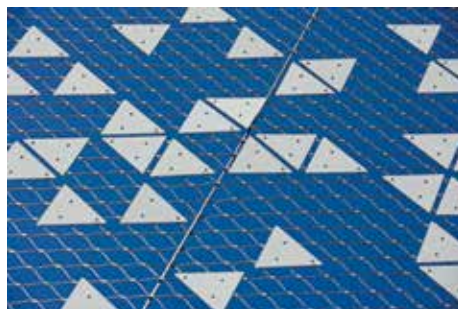
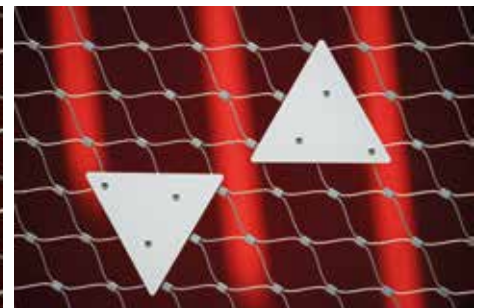


**A** Webnet grid measuring 18.5 x 6.8 metres is mounted on the east and west façades of the building. Two thousand equilateral aluminum triangles with a side length of 160 mm are riveted onto the Webnet at each façade.

The triangles constitute a haptic structure and in the corners are assembled to form the word "HOTEL". The reflective film applied to the aluminum triangles bounces back the incident light by day and night.

#### Jakob-Products

Webnet rope  $\varnothing$  2 mm, mesh aperture 60 mm, vertical stabilizer ropes  $\varnothing$  6 mm.



For more information, visit [www.jakob.com](http://www.jakob.com).

## Supplying Singapore's Architecturally Demanding Structures Without Compromising Quality

**R**enowned as one of Asia's most modern and dynamic cities, Singapore has achieved this status through its breath-taking cityscape and architectural accomplishments. Though visible, what remains unseen to many is NS BlueScope Lysaght Singapore's high quality supply and installation services to Singapore's rapid growing landscape.

NS BlueScope Lysaght Singapore established since 1965 under the umbrella of BlueScope Steel Limited Australia, one of the world's most dynamic and largest steel solution provider and roll former. For the past 50 years, the steel downstream company collaborated with various developers and architects, providing them the most suitable products and solutions in constructing iconic landmarks such as Marina Bay Sands, Singapore National Library, One Raffles Quay, ITE College Simei Campus, Pit Building, Marina Bay Street Circuit and many others.



Marina Bay Sands in Singapore.



The Star Vista in Singapore.



West Park BizCentral in Singapore.



21 Richards in Singapore.

To many, NS BlueScope Lysaght Singapore's name is synonymous with the manufacturing, supply and installation of a truly tried and tested suite of premium steel building products and solutions. Their range of products meets the requirement of the high architecturally demanding structures, without compromising on strength, flexibility or aesthetics.

#### 10 Year Warranty for Supply and Install Services

In assurance of its incomparable quality in supply and installation, NS BlueScope Lysaght Singapore provides 10 year warranty for their supply and installation services. The warranty entails an agreement with assurance that the steel roof cladding supplied and installed would not perforate by corrosion and shall be watertight and leak proof for a period of 10 years from the year it was installed.

On top of this, a five year warranty is provided when Clean COLORBOND® is being used. In the event the product fails to perform as warranted due to defect in the material, NS BlueScope Lysaght promises

to repair, resupply or compensate the product back to the customer. All Lysaght Products are tested and developed at BlueScope Technology Centre in Chesterhill, Australia. This independent testing facility is accredited internationally by the National Association of Testing Authorities (NATA) and the Commonwealth Scientific and Industrial Research Organization (CSIRO) in Australia.

#### Project References: Mapletree Benoi Logistic Hub

Through NS BlueScope Lysaght Singapore's supply and installation service, Mapletree Benoi Logistic Hub conferred the BCA Green Mark Platinum Award. The award was conferred for its modern roof with skylight stripe integrated with photo sensor which reduces light consumption and hence, greatly reducing its overall electric bills.

Completed in 2014, NS BlueScope Lysaght Singapore undertook the supply, delivery and installation of the metal roofing works including the fall arrest system. The logistics hub is a five-storey ramp-up facility located near Jurong and Pasir Panjang Ports with easy access to the city. Due to its large roof area and good site accessibility, onsite rolling became the preferred installation choice for roof lengths of 67m to ensure economical and ease of installation. Meeting the needs of the builder and architect's requirements, products with excellent uplift performance was utilised such as LYSAGHT® KLIP-LOK® OPTIMA™ 0.54mm in Clean COLORBOND® ULTRA steel was deemed most suitable for this high tensile profile.



For more information, contact NS BlueScope Lysaght Singapore Pte Ltd at tel (+65) 6264 1577 or visit [www.lysaght.com.sg](http://www.lysaght.com.sg).



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## ArchXpo 2015 Product Highlights

The Architecture & Building Services 2015 Series (ABS 2015 Series) took place on 29 & 30 September and 1 October 2015 at the Marina Bay Sands Convention Centre in Singapore. The ABS 2015 was spearheaded by ArchXpo 2015, the 2nd International Exhibition of architecture & The Built Environment being organised by the Singapore Institute of Architects and CEMS; co-located with the 14th Safety & Security Asia and the 12th Fire & Disaster Asia, in collaboration with the Security Systems Association of Singapore. The other co-located shows were the 3rd International Facility Management Expo or iFaME 2015, which is being supported by the International Facility Management Association (Singapore Chapter); the 3rd LED & Light Asia 2015, endorsed by the Lighting Association of Singapore and the Singapore Manufacturing Federation; and the Work Safe Asia 2015, supported by the Workplace Safety & Health or WSH Council. ArchXpo 2015 was a showcase of technologies, products and services for the architectural and built environment industries and was also a key pillar of the Archifest series. Here are some exhibitors with product highlights.

### Epson Singapore

Epson Singapore presented its digital printing industry solutions for the architectural and engineering industries at ArchXpo 2015. Trade visitors explored the possibilities of connectivity applications that bring together the best of Epson's latest large format printers ideal for technical drawings, and its innovative interactive projectors. An extensive series of Epson's labelling printers and solutions were also showcased, including models that are suitable for workplace safety applications.

Highlights at Epson's booth included:

- **Connectivity Applications for Architects and Engineers**  
Epson's SureColor™ SC-T5250 and SC-T7270 large format printers present maps, technical drawings, and 3D renderings through durable and vibrant professional printouts, made with Epson all-pigment UltraChrome™ XD Ink. Architects and Engineers can go from creation to print seamlessly with



An extensive series of Epson's large format and labelling printers, and its applications and solutions were showcased at its booth at ArchXpo 2015. Photo: © Epson Singapore

the interactive functionality of Epson's EB-595Wi interactive projectors, connected to the large format printers. Delivering unprecedented black density and true-to-life colour gradations and definitions with Epson's UltraChrome HD ink, the SureColor SC-P807, an A2 inkjet desktop model was also available at the booth.

- **Extensive Range of Labelling Solutions**

- **Colour Labelling:** Providing one-step Just in Time Color™ labelling solutions through dependable and durable commercial inkjet prints, Epson's ColorWorks™ range deliver fast and efficient GHS color-label printing to your production floor. Models displayed included the Epson ColorWorks™ C3510, which reduces label wastage while providing waterproof, smudge-proof, alcohol & chemical resistant customised colour labels. Built for tough work environments, the Epson ColorWorks™ GP-C830 was also showcased.

- **LabelWorks™ range:** Ranging from Home/SOHO to general as well as professional use to meet every business' labelling needs, models included the Epson LabelWorks™ LW-300, LW-400, LW-700, LW-900P and LW-1000P.

Said Ms Tan May Lin, Epson Singapore's General Manager (Sales Division): "Singapore is known globally as a shining example of talents who converge to transform our island into an international city. By showcasing innovative solutions to increase productivity and workplace safety for the building sector, we look forward to share and inspire industry professions to tap on technology to create even bigger successes in the areas of architectural design and manufacturing."

**For more information, visit [www.epson.com.sg](http://www.epson.com.sg).**

## Getz Bros & Co (Singapore) Pte Ltd

Getz Bros & Co (Singapore) Pte Ltd launched 'EASYDEK' at ArchXpo 2015. GETZ EASYDEK specialises in solutions for the temporary protection of interiors during construction, remodeling and maintenance. GETZ EASYDEK supplies high quality materials, which meet the highest standards and has a proven track record in the construction industry.

GETZ EASYDEK supplies a wide range of covering materials of which the focus is always on optimal protection, time saving and ease of use. GETZ EASYDEK only supplies materials, which have been thoroughly tested to the highest standards.

### Carpet/Carpet Tiles

Carpet Cover is a super strong, self-adhesive carpet film, ideal for covering carpet. It comes with reverse wound to allow for easy and fast application without tape. It stays in place well and is perfect for stairs with carpet. It is available in rolls of 500 metres length, making it perfect for big projects.

### Laminate, Tiles or Linoleum

Floor Cover is a super strong, self-adhesive film for laminate, tiles and linoleum. It also has reverse wound to allow for easy and fast application without tape. It stays in place well and it is perfect for wooden stairs. It is available in rolls of 500 metres length. Perfect for large projects.

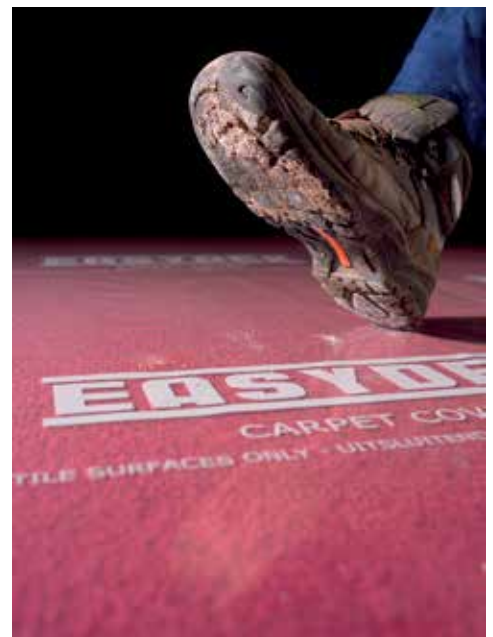
### Ideal for recently laid floor

Multi-Cover Breathable is a three-layer covering material for the temporary protection for laid floor such as cast floors, natural stone and parquet. The underlayer is an anti-slip, slightly adhesived non-woven fibre. The material is breathable, as a result of which it can be applied to new, recently laid floors. Not only is the Multi-Cover Breathable permeable but also moisture-tight from the top.

### Shock absorbent and anti-slip

Multi Cover Premium is ideal for covering hard floors and laminate, existing parquet and varnished stairs. It is shock absorbent and comes with an anti-slip adhesive layer. Multi Cover Premium is a solution for protecting flocked flooring. Multi-Premium Plus is also available in 80cm. It is ideal for corridors and stairs.

**For further information, visit [www.getz.com.sg](http://www.getz.com.sg).**



Photos courtesy of Easydek.

## Roxwell Pte Ltd

Roxwell Pte Ltd launched the Newlife Wall-Mag™ and MACO® printable flexible magnetic receptive sheet at ArchXpo 2015 on 1 October 2015. The revolutionary product comes in two versions: metal sheet that is supported by another magnetic base with adhesive for normal wall surfaces, and magnetized sheet for metal surfaces. Both have excellent magnetic receptive ability. Each sheet can be easily cut, bent, twisted, coiled, or can be machined into almost any shape without damaging its permanent magnetic receptive properties.

NewlifeWall-Mag™ and MACO® are gaining popularity in homes and offices, restaurants, advertising and MICE industries for uses as magnetic wallpaper, advertising materials and event communication respectively in Asia. The printable flexible magnetic receptive sheet can be easily printed with personalised images, and be exchanged and/or replaced effortlessly when applied to the magnetic base or metal surface. Multiple layers of magnetic receptive sheets can also be applied to create attractive designs and decors. The versatility of this product opens the door to creativity at lower costs across multiple industries.

“As people move forward, they need to adapt to new changes fast. In all businesses, example the hospitality sector, the cost of each business is so high. Our main aim is to help companies sustain their operation costs by introducing them this new technology,” said Collin Ng, chief operating officer, Roxwell Pte Ltd.

Roxwell Pte Ltd is the exclusive distributor of Newlife sheet in Singapore and Asia Pacific region.

For more information, visit [www.roxwell.com.sg](http://www.roxwell.com.sg).



Collin Ng, Chief Operating Officer (second from right), Roxwell (Singapore) Pte Ltd and his team at their booth. The column on the right hand side of the photo shows the Newlife magnetic wallpaper pasted on it.

## Old Wood LLC



David Old, owner, Old Wood (left) and Shiloh Old, VP, International Operations, Old Wood at their booth.

Old Wood LLC uses sustainably harvested timber to manufacture beautiful, solid end grain and wide plank flooring for residential and commercial use. The company is dedicated to the sustainability, improvement, and proper utilisation of forests, both domestically and abroad.

This was the company's first time participation at ArchXpo show. “This is our first show in Singapore and we are looking for distributors who can either stock our products or can push our products to architects in Singapore,” said David Old, owner of Old Wood LLC.

The company's range of products includes End Grain Floors and Plank Floors. Old Wood LLC is an export grade maker of end grain floors for commercial, industrial, and residential applications. These end grain blocks are beautiful, unique and extremely durable. From the forest to the final product, the company controls every aspect of the production.

“End Grain flooring is the only wood floor suitable for extreme duty projects such as airport and rail concourses. Our mesquite

end grain has a durability 'factor' approaching that of stone and far exceeds any carpet, LVT or other man made and so-called 'engineered' floors. In and of itself, the natural, solid wood is tough, beautiful and will wear for decades of the hardest use. This is the definition of practical, environmentally sound beauty and design," said David.

Old Wood LLC makes a wide variety of planks from classic, smooth finishes to the world's widest planks. Hand-made, museum grade finishes are available and custom colours are also possible. All the company's materials are sourced from sound forest management efforts and largely come from fire reclaimed and NEPA sourced timber.

"We sell our flooring products overseas for hotels and restaurant projects because end grain is very durable. It holds up well under high traffic. It is durable and hard but at the same time it is soft under the feet. We have 12 different species in various sizes," said Shiloh Old, vice-president, international operations, Old Wood LLC.

In Singapore, Old Wood LLC is working directly with three high level outlets for its product, which now have samples and pricing in hand and are able to service the most demanding projects. "After the show, we trained and educated these already skilled and talented operators so we are confident in a professional outcome for any client working with them," said David.

Old Wood's products are available in Singapore through World of Wood Pte Ltd (WOW), Timplex Pte Ltd/Perswood Pte Ltd and The Woodcrafters Pte Ltd.

**For more information, visit [www.oldwood.us](http://www.oldwood.us).**

## Arc Floor Pte Ltd

Arc Floor Pte Ltd exhibited a sustainable range of flooring at ArchXpo 2015. The company, previously called Cheap & Beauty Teak Parquet, renamed itself as Arc Floor in 2015 to rebrand itself from a supplier of hardwood flooring to a supplier of green timber flooring products.

"We participated in the exhibition to inform our customers that we are going green in line with the Singapore Government's sustainability efforts," said Teo Sing Ee, business development manager, Arc Floor Pte Ltd.

"We are here to create awareness for our company and our products. The wall cladding and decking at our booth is all done by us to give people a first hand idea and feel of what we are doing," said Sheryl Lim, general manager of Arc Floor Pte Ltd.

Arc Floor presented three types of flooring products at the show: CSF Flooring (Composite Solid Fibrewood), Resilient Flooring and Laminate Flooring.



**Miss Sheryl Lim, general manager of ARC FLOOR PTE LTD receiving the Gold Award in the 'Best Boutique Booth' category in the UP Awards from Mr Edward Liu, managing director, Conference & Exhibition Management Services.**

### **CSF Flooring (Composite Solid Fibrewood)**

CSF makes it possible to create ecological design flooring for residential applications. An innovative flooring, that is defined by time, it is extremely robust, PVC-free, free from plasticizers, can be recyclable, is ecological and exclusively made in Germany.

### **Resilient Flooring**

Possibly the easiest type of flooring to install and maintain, resilient flooring offers options to people who want an easy-to-clean, durable and stylish floor coverings.

### **Laminate Flooring**

Laminate wood flooring is made from composite wood pressed together at high temperatures. The photograph or image of hardwood is then covered over the composite wood to form the laminate, thus is cheaper. Laminate flooring is also easier to clean on a regular basis.

In the 'Best Boutique Booth' category of the UP Awards organised by the show organiser for the best-looking show-stopper booths with the most flair and innovation, Arc Floor Pte Ltd won the Gold Award.

**For further information, visit [www.arcfloor.com.sg](http://www.arcfloor.com.sg).**

## Beltiston™ Ventures

Beltiston™ Ventures launched a new curving profile and studs system at ArchXpo 2015. Manufactured, invented and patented by I-Profil SRL in Italy, the new product called 'Cobra curving systems for plasterboards,' is the result of the company's years of experience gained from the drywall industry coupled with intensive R&D.

According to Beltiston™ Ventures, two of the most critical concerns all architects and interior designers have when it comes to designing curving elements are to realise and achieve a clean curvature with true radius. Property owners and builders, too, have different concerns with the cost and difficulty of realisation.

To address these concerns, the Cobra curving system offers a completely flexible system to meet and satisfy the creative and sophisticated needs of achieving the architect's and interior designer's vision of achieving a drywall partition or ceiling system with the capability to be shaped to meet any design specifications. The Cobra curving system is very workable and pliable, that can bend without creating snags, burrs or crimps which in turn provides a nice and smooth framework.

The aesthetic advantages of that 0.6mm thick structural framework are evident in the beautiful curved partition, curved wall lining, domed ceiling and arches as well as in the side by side barrel and cross vaulted ceilings.

Another advantage of the Cobra curving system is that it provides savings in labour and installation cost because only one person is needed to carry out the framework installation. This is made possible by the clever design that allows bending just with your hands or any supporting base. Once bent to the required shape, the curving profile and studs maintain its curvature without the need for additional fixing tools or materials. For curving wall application, the vertical studs slide very easily into the curving profile and automatically lock into the required position while remaining perfectly upright.

"We developed this product to give architects, interior designers and engineers a new way of construction," said Valentina Garavaglia, export director, I-Profil SRL.

In Singapore, the Cobra curving system has been specified in the new Singapore Chinese Cultural Centre (SCCC) in Shenton Way. "The interior design consultant has designed a unique cloud ceiling which is curving horizontally and vertically and we are working closely with the NSC ID to achieve this consistent curvature and sound reflection for the hall in the Centre," said Richard Tan, managing director, Beltiston Ventures Pte Ltd.

"The Cobra curving system is extremely flexible and easily bend by hand. Once bent and formed, it maintains the curvature without additional fixing and materials but the other most important aspect is safety. Our system will never allow a screw to miss any contact with metal sheet when securing the boards, unlike conventional methods of cutting straight studs," he added.

Some popular applications of the Cobra curving system include: curved partition walls, curved wall linings, cylindrical columns & beams, curved false ceilings, curved or inclined ribs, barrel & cross vaults, arches, domes, clouds, cambered ceilings; and wavy, organic and S-shaped walls & ceilings.

Beltiston™ Ventures is the official partner of the Cobra curving system for the Asia and Pacific region.

**For more information, visit [www.beltistonventures.com](http://www.beltistonventures.com) or [www.iprofil.com](http://www.iprofil.com).**



**Valentina Garavaglia, Export Director, I-Profil SRL (left) and Richard Tan, Managing Director, Beltiston Ventures Pte Ltd, posing with the Cobra curving system at their booth.**

## Asia Paint (Singapore) Pte Ltd

Asia Paint (Singapore) Pte Ltd, one of Singapore's leading paint manufacturers, showcased its eco-friendly EKOLAC Wood Varnish Series at ArchXpo 2015. The Ekolac waterborne wood varnish series is an exceptionally durable and eco-friendly finish for all types of wood surfaces. Awarded the Green Label by the Singapore Environment Council, customers can be assured that Ekolac products meet international quality and environmental standards.

"This is our first time participating in the show and we hope to promote our eco-friendly paints to the trade visitors," said Jeff Koh Chee Yong, operation director, Asia Paint (Singapore) Pte Ltd.

**Ekolac 1300 Outdoor Varnish**

Ekolac 1300 Outdoor Varnish is a single component waterborne top coat finish for the protection of exterior commercial and residential timber deckings, fixtures and furniture. Ekolac 1300 is enhanced with UV absorbers to help minimise fading and resist the rigours of the rain, sun and wind. It has low VOC/odour; it is easy to apply (brush, pad or roller); has excellent UV resistance; good water repellance; and good fungi resistance.

**Ekolac Hydrostain**

Ekolac Hydrostain is a waterborne wipe-on stain for wood substrates prior to the application of top coats. Stain your timber into your desired tone and accentuate the natural beauty of the timber grain patterns. It is easy to apply (brush or roller, followed by wiping with cotton cloth); has excellent flow; excellent wetting; excellent adhesion; and good colour consistency.

**Ekolac 2000 Indoor Varnish**

Ekolac 2000 Indoor Varnish is a single component waterborne top coat finish for the protection of interior commercial and residential timber floors and furniture. It is also available as Ekolac 2200 2-Component finish, enhanced with a hard-wearing hardener for high traffic areas. It has low VOC/odour, it is easy to apply (brush, pad or roller); has excellent wear resistance; excellent flow; and available in flat matt, matt, semi-gloss and gloss finish.

For more information, visit [www.asiapaintsingapore.com](http://www.asiapaintsingapore.com).



Jeff Koh Chee Yong, Operation Director (left) Asia Paint (Singapore) Pte Ltd and Koh Kah Hian, Executive Director, Asia Paint (Singapore) Pte Ltd.

## Ecosand System (Singapore) Pte Ltd

Ecosand System (Singapore) Pte Ltd introduced Ecosand™ - an 'invisible' water purification system appearing as a beautiful layer of sand and pebbles at the bed of the pond. Ecosand™ eliminates the requirement for cumbersome filter chambers which take up more than 30 percent space comes with underground pipes which often leaks. The Ecosand™ System needs yearly maintenance and only the usual overflow pipe.

"The Ecosand™ system is the latest methodology to replace filtration, uses specially selected and extensively tested micro-organism to purify the water. There is no water change required comes with minimum maintenance. It is suitable for condominiums, hotels, and places with outdoor/indoor ponds or tanks," said Willy Tan, director, Ecosand System (Singapore) Pte Ltd.



Willy Tan, Director, Ecosand System (Singapore) Pte Ltd showcasing the EcoSand™ system in the pond at his booth.



In Singapore, the Ecosand™ has installed at Residential ponds/tanks, HortPark and upcoming projects, the Sheraton Towers Singapore, Safari and Changi Airport Terminal 3.

The Ecosand™ is an award winning product. The Ecosand™ system won the ECO-B New Eco Product Award in 2013 at the 2nd Malaysia Eco Building & Design Exhibition 2013.

For more information, visit [www.ecosandsystem.com.sg](http://www.ecosandsystem.com.sg).

## Hunter Douglas Singapore Pte Ltd

Hunter Douglas Singapore Pte Ltd presented the NBK® architectural terracotta façade system at ArchXpo 2015. NBK® is a ventilated curtain wall/rainscreen system whose exposed components are made exclusively from terracotta. The system components are manufactured so as to maximise shape accuracy and guarantee best fit. State-of-the-art drying and firing techniques allow a nearly tolerance-free production of units up to 180 cm long.

The NBK® Terracotta support system – a patented development within the NBK® product range – comprises a few individual components and ensures excellent integration of the system in any classical and contemporary wall construction.

With its “Large”, “Mid” and “Shingle” ranges, the versatile NBK® system offers architects maximum scope for creativity. Purpose-made project-specific developments provide designers with practically boundless options. Many of the buildings that feature a NBK® façade are prime examples of forward-looking architecture.

“The NBK® architectural terracotta offers more colours and panel sizes for architects to choose from. We completed our first high-rise project using the NBK® Terracotta Façade system for the Anggerek Desa Technology Park Phase 3 Brunei, a project by the Brunei Economic Development Board (BEDB),” said Wong Yew Cho, general manager, Hunter Douglas Singapore Pte Ltd.

Other NBK® architectural terracotta completed projects includes the Equarius Hotel at Resorts World Sentosa, Sentosa Island, Hwa Chong Institution. On-going projects are 65 Lloyd Road.

For more information, visit [www.hunterdouglas.com.sg](http://www.hunterdouglas.com.sg).



Sidney Tan, Façade & Sun Control Executive (centre), Hunter Douglas Singapore Pte Ltd and her colleagues standing in front of the colourful NBK® terracotta panels at their booth.

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Southeast Asia Construction (SEAC) is a regional trade magazine published in Singapore and distributed to a qualified readership in Asia and all over the world. The magazine features the engineering aspects of civil and structural projects worldwide. It also covers the latest on construction equipment, materials, technology, management and industry news as well as major construction machinery trade shows at regional and international levels.



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## BuildTech Asia 2015

### International Building Technology Expo

A part of  SINGAPORE CONSTRUCTION PRODUCTIVITY WEEK 2015

13-15 Oct 2015  
Singapore Expo Hall 3  
Singapore

## BuildTech Asia 2015 showcases new building technologies and materials aimed at improving construction productivity

BuildTech Asia 2015, a leading trade exhibition for the built environment, concluded after three days of showcasing smart construction technologies and building materials from across the Southeast Asia region and the world.

Organised by Sphere Exhibits and hosted by the Building and Construction Authority (BCA), BuildTech Asia 2015 was held from 13-15 October 2015 at the Singapore Expo, in conjunction with Singapore Construction Productivity Week (SCPW).

At the opening ceremony of SCPW, BCA announced \$2.6 million funding for research programmes to drive Design for Manufacturing and Assembly (DfMA) across the sector and additional funding for Virtual Design and Construction (VDC). In line with this push towards technology adoption and Asia's growing demand for building and construction technology, BuildTech Asia 2015 displayed a wide range of technologies and materials to help industry stakeholders from across the value chain maintain their competitive edge through higher productivity.

Over 5,200 visitors from across the region had the opportunity to see advanced construction technologies and smart materials, some of which were accompanied by live product demonstrations and product workshops, by as many as 150 exhibiting brands.

An international turnout of exhibitors, trade associations and business delegations from over 13



From left to right: Dr John Keung, Chief Executive Officer, Building & Construction Authority; Mr Quok See Tiat, Chairman, Building & Construction Authority; Mr Chua Wee Phong, Chairman of Sphere Exhibits; and Ms Elaine Chia, Managing Director, Sphere Exhibits. Photo: © Singapore Construction Productivity Week



Visitors at BuildTech Asia 2015. Photo: © BuildTech Asia 2015

countries and regions including Austria, China, India, Indonesia, Malaysia, Myanmar, Pakistan, Philippines, Portugal, Russia, Thailand, Turkey and Vietnam, visited BuildTech Asia 2015.

Mr Chua Wee Phong, Chairman of Sphere Exhibits Pte Ltd, said: "We are pleased that the fifth edition of BuildTech Asia continues to see strong interest and support from exhibitors and visitors from all over Asia and the world. This year, BuildTech Asia introduced key productivity-enhancing technologies and materials to the built environment sector, and we hope that the increasing uptake of these technologies will spur the construction industry towards greater productivity."

BuildTech Asia 2016 will be held in October 2016. For more information, visit [www.buildtechasia.com](http://www.buildtechasia.com).

## ATLANTIC

With a presence in over 70 countries, ATLANTIC is a French brand that manufactures and commercializes multi-energy indoor comfort solutions, since 1968.

At BuildTech Asia 2015, ATLANTIC launched the new ONDEO premium range of compact square water heaters from 15 to 30 litres. ONDEO features exclusive patented technologies achieving optimum efficiency, energy savings and long-lasting user-friendliness in the day-per-day use. Its elegant and compact design was conceived to aesthetically fit into the customers' interior.

### Features of ONDEO:

- +50 percent tank lifetime thanks to O'Pro exclusive anti-corrosion system (patented technology)
- Diamond-quality enamel for tank robustness and long life (patented technology)
- Energy savings with easy and efficient temperature control
- Premium and compact design
- Safe operating – Full compliance with European standards for electric safety and user protection (IP 24)



To further demonstrate its wide DHW offer on Singaporean market, ATLANTIC also exhibited two complementary solutions: 30 to 80 litres Steatite Slim water heaters, a slim design & multi-position solution fitted with scale and corrosion resistant Steatite technology, and Odyssee heat water pump heater, the optimum energy saving and environmentally-friendly solution.

Further to sustainable commercial success in Asia and Oceania areas, ATLANTIC invested in a new factory dedicated to Asian market complying water heaters. This allows ATLANTIC to provide a better service to its customers through shorter route to markets and local support. Built on full French technologies and management, the Thailand plant supplies the most highly demanding markets worldwide.

Having all products CE certified (European markets certification), the company's products are also complying with specific market specifications and labels such as KC. They are also energy efficient, for GROUPE ATLANTIC complies with the European environmental norms (ErP norms).

ATLANTIC has a sales representative in Singapore. For more information, contact Borislav Radenkov – Balkans, Asia and Oceania Area Manager, or visit the websites [www.groupe-atlantic.com](http://www.groupe-atlantic.com) or [www.atlantic-comfort.com](http://www.atlantic-comfort.com).



From right to left: Marek Varhol, Atlantic International Director; Florence Beauchet, Communication Officer; and Loic Rousset, Product Manager, Electric Water Heaters.

## BEECK' sche Farbwerke GmbH

BEECK' sche Farbwerke GmbH showcased its range of indoor and outdoor mineral natural paints at BuildTech Asia 2015. The company, which was exhibiting in the show for the first time, has been specialising in pure mineral paints for the past 120 years in Germany.

Obtained from practically unlimited resources of raw mineral materials, the pure mineral paints are integrated in material cycles. Free from solvents, plasticisers and biocides, they enable a healthy living environment. "Our mineral paints are a very special type of paints. They use only natural mineral pigments and no chemicals at all. They are very eco-friendly," said Elena-Bianca Müller, International Development Manager, BEECK' sche Farbwerke GmbH.

BEECK's top quality mineral paints have been used on historical buildings for almost 120 years and they have withstood the test of time. The cheerful character, the play of colours and the lightfastness of the pure mineral pigmentation enhance the status of each building for many years. This unsurpassed durability of BEECK mineral paints makes their use maintenance friendly and therefore economical.

"Our mineral paints are very long-lasting and durable. We offer a standard warranty of 25 years for use on exterior facades," added Elena-Bianca.

Facades with pure silicate coatings can stay naturally clean and free from algae due to high alkalinity. The coatings are capillary-active and have ideal open porosity, and are therefore extremely valuable in building physics terms. Thanks to silicification, they form an inseparable mineral unit with the render, do not tend to flake and remain vapour-permeable for optimal building health.

BEECK mineral paints are available in Singapore through Monju Partners Pte Ltd. For more information, visit [www.beeck.com](http://www.beeck.com) or [www.monjuglobal.com](http://www.monjuglobal.com).



Elena-Bianca Müller, International Development Manager, BEECK'sche Farbwerke GmbH at the booth.

## Woodsfield Engineered Wood Systems Pte Ltd

Woodsfield Engineered Wood Systems Pte Ltd, part of the Woodsfield Group, showcased its tropical hardwood glulam and CLT panel at BuildTech Asia 2015. It was Woodsfield's first time participating in the show and the company came to promote the sustainable features and benefits of glulam technology to visitors.

"Glulam is a sustainable, environmental friendly and energy efficient product because of its higher strength properties compared to softwood timber. The required structure sizes are much smaller compare to softwood timber," said Chelphine Chung of Woodsfield Engineered Wood Systems Pte Ltd.

Glulam (glue laminated timber) is a structural timber product manufactured by gluing together individual pieces of dimensions lumber under controlled conditions. The attributes of this wood product make it an attractive architectural and structural building materials. Glulam is one of the most versatile construction materials. It can create structural features to an almost limitless variety of straight and curved configurations. The benefits of glulam technology are numerous such as dimensionally stable, long span structure, better strength to weight ratio compared to steel and concrete. Hardwood Glulam timber has smaller dimensions compared to softwood glulam for same design load. It also has good fire resistance (better charring rate value compared to softwood glulam timber) and less maintenance compared to softwood timber, etc.

"We hope we can convey the benefits of glulam to the visitors through this show," said Chelphine.

For more information, visit [www.woodsfieldgroup.com](http://www.woodsfieldgroup.com).



Chelphine Chung (left) and her colleague of Woodsfield Engineered Wood Systems Pte. Ltd.

## Nexxis Systems Pte Ltd

Nexxis Systems Pte Ltd launched the Permalight Photoluminescent Evacuation Guidance System (PEGS) at BuildTech Asia 2015. PEGS is a non-radioactive fail-safe emergency exit path illumination system that does not need power or maintenance. This green and safety solution is operated by recycle surrounding lights or sunlight through light storing pigments, which can perform up to 25 years without maintenance. Permalight is manufactured in Germany according to standard DIN 67510, which meets the requirement set out in Hong Kong Fire Services Department Code of Practice (C.O.P.) section 5.1 Audio/visual advisory system.

"This luminous tape is designed to help occupants evacuate from a building in the event of a fire. The tape can be placed on the wall, floor, door frame, staircase, handrail marking and even on signage (directional sign, fire equipment sign, etc.) to help the building occupants find their way to the exit sign," said Amos Chew, project executive, Nexxis Systems Pte Ltd.

During a fire heavy smoke forms within seconds and quickly rises to the ceiling, obscuring the electrical lighting and signs installed in high location. Visibility and air to breathe remain in the floor proximity to a height no more than one foot above ground. Photoluminescent fail-safe illumination installed in low location therefore provides effective evacuation guidance during fire breakouts.

### Key benefits of Permalight

- Intensive luminance up to 95 hours
- Non-radioactive
- Non-toxic
- No need for power
- No maintenance cost
- Eco friendly and reusable
- LEED credit opportunity
- 25 years performance warranty



Amos Chew (third from left), Project Executive, Nexxis Systems Pte Ltd and his team.

Currently, PEGS is widely used in the USA, Canada, UK and Germany. "The product became very popular in the USA after the 9/11 terrorist attacks," said Amos. "In any part of the world, the safety of the occupants is the top priority for building owners. Therefore, we see a lot of opportunity and need for PEGS in Singapore too," he added.

PEGS is distributed in Singapore by Nexxis Systems Pte Ltd. For more information, visit [www.nexxissystems.com](http://www.nexxissystems.com) or [www.permalight.com](http://www.permalight.com).

## USG Boral Singapore

USG Boral Singapore presented the Fiberock® Aqua-Tough™ Interior Panel at BuildTech Asia 2015. Fiberock® Aqua-Tough™ Interior Panels are engineered to provide increased resistance to impact, moisture, mould, abrasion, indentation and penetration for interior walls and ceilings in demanding construction applications. Strong, solid and durable, they are suitable for use in wet areas, including residential showers and tub surrounds. They also resist denting, breaking and puncturing – even in high-traffic areas. Fiberock® Aqua-Tough™ Interior Panels wall systems are tested to comply with BS476 Part 22 for fire resistance up to 1.5 hours.

"It is made of fibre gypsum which means that waterproofing can be done directly on top of the panel. It is tough, and is resistant to water and fire," said Terrence Goh, Architectural Specifications, Assistant Manager, USG Boral Singapore.

Fiberock® Aqua-Tough™ Interior Panels are made from 95 percent recycled materials and is Green Label Certified by Singapore Environment Council (SEC).

For more information, visit [www.usgboral.com](http://www.usgboral.com).



## National Tiles Pte Ltd

National Tiles Pte Ltd, a leading supplier of ceramic tile, mosaic, marble, granite, vanity top, faucet and sanitaryware in Singapore, launched a hexagon-shaped ceramic tile at BuildTech Asia 2015.

Made in China, the ceramic tile collection comes in a wide variety of patterns and colour shades for you to select from so that you can enjoy the beautiful designs. Available in the size of 230x230mm, the tile meets the requirements of any projects.

Hexagon-shaped tiles are a growing trend in wall and floor design now. Strong and durable, the tiles can be used not only in office or home, but also shopping mall, school, clubhouse, etc.



Michael Jiang, Executive Director (left) and Angel Luk, Managing Director, National Tiles Pte Ltd.



In addition to the hexagon-shaped tiles, National Tiles also offers ceramic tiles Made in Italy.

### Le Crete Classic

The original "Le Crete Classic" range has introduced new sizes, jet cut and rectified, in: 10x10 (also available as decoration "Cementine"), 10x20 and a beautiful brick size: 5x20. These sizes give the opportunity to "play" with the modularity (even mixing all of them: 10x10, 10x20 and 5x20) but also singularly fixed! There is also a brick size in 5x20, also mixed-layered in all the colours, white, black, and grey.



### Konzept Le Crete Color Mood

The range's name "KONZEPT" is due to the mixture of different features of the ceramic material like the colour's shades, (colour mood), its shapes (new and varied sizes) and the unusual and pretty new 3.5 mm laminated stoneware.



Konzept Le Crete Color Mood is formed by 3 colour concepts:

- 1) **COLD:** Terra Bianca, Terra Nera and Terra Grigia
- 2) **WARM:** Terra Bejge, Terra Tortora and Terra Moka
- 3) **EARTH:** Terra Bordeaux, Terra Verde and Terra Cotta.

### Le Crete Air 3.5

Le Crete Air 3.5 is an unusual and new ceramic material. It is an extremely slim and large-sized laminated porcelain only 3.5mm thick.



### Ornamenti

Ornamenti presents original and precious decorations in the new sizes: in the rhombus with graphics inspired to fashion "haute couture", on the hexagons with golden textures which add value to the ranges le Crete and Konzept.



Photos: HANAMI

For more information, contact National Tiles Pte Ltd at tel (+65) 6898 4330, fax (+65) 6898 4339, email [nationaltiles@singnet.com.sg](mailto:nationaltiles@singnet.com.sg) or visit the website [www.nationaltiles.com.sg](http://www.nationaltiles.com.sg).

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4-6 Nov 2015  
Marina Bay Sands  
Singapore

## World Architecture Festival 2015 brings together design professionals under one roof

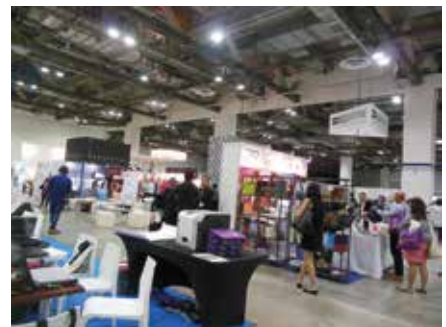
The World Architecture Festival 2015, one of the world's largest international architectural events, was held from 4-6 November 2015 at the Marina Bay Sands in Singapore. The Festival brought together over 2,200 architects and designers from around the world for three days of presentations, debates, discussions and awards.

The Festival's most prestigious prize, the renowned World Building of the Year, was awarded to Ole Scheeren of OMA for the Interlace in Singapore. In addition to the conferences, there was also an exhibition on building products and innovative materials.

Here are some of the highlights of the exhibition.



Photo: © World Architecture Festival – The Interlace by OMA/Buro Ole Scheeren



## AkzoNobel

AkzoNobel, a leading global paints and coatings company and major producer of specialty chemicals, was Headline Sponsor at the World Architecture Festival (WAF) 2015, held in Singapore on 4-6 November.

Calling on centuries of expertise, AkzoNobel supplies industries and consumers worldwide with innovative products and sustainable technologies designed to meet the growing demands in the areas of Decorative Paints, Performance Coatings and Specialty Chemicals. AkzoNobel's Decorative Paints business supplies paints to both the professional and retail markets, fronting globally recognized brands such as Dulux, Sikkens and Hammerite which are designed to protect in the harshest environments, yet add beauty, contrast and flair to design.

At WAF 2015, AkzoNobel introduced Dulux Ambiance™, a range of premium interior and special effects wall paints, to the professional market. The Dulux Ambiance™ range comprises Dulux Ambiance™ All, a premium interior wall paint with a colour palette of depth and intensity, reflecting personal inspirations and tastes, and Dulux Ambiance™ Special Effects Paint, a selection of fine featured finishes and textures – such as Linen, Marble, Metallic and Velvet – that adds both a new physical and visual dimension, bringing an unique touch and feel to walls.

In the spirit of supporting home owners in achieving the look they have always dreamed of, Dulux's global colour and interior experts have also created Ambiance™ Collections. The four Ambiance™ Collections – Classic Luxury, Elegant Romance, Creative Expression, and Modern Contemporary – are beautiful thematic ideas that inspire the personalised interior design journey.

Dulux also partnered with the well-renowned supermodel, actress, entrepreneur, and eco-warrior, Nadya Hutagalung, to create her very own Ambiance™ Collection, an intense palette that speaks of oak, warm stone, optimism and positive energy. "The colours in Nadya's Collection not only complement her love for natural materials, warm textures, wood and canvas, they also reflect her contemporary style and eclectic tastes," said Alex Briggs, Marketing Manager for Projects & Professionals (Singapore & Malaysia), AkzoNobel Decorative Paints.

AkzoNobel, through Dulux, constantly invests in developing new formulations and techniques. The company believes in giving its partners products of better performance, so that they can create better spaces for a brighter future.

For more information, visit [www.akzonobel.com](http://www.akzonobel.com).



Alex Briggs, Head of Professional Marketing, SG & MY, AkzoNobel Decorative Paints

## Eureka Technologies

Eureka Technologies, incorporated in Singapore in 1992, is a distributor of Gira. Eureka provides total integrated solutions in the hospitality, commercial and residential industries. Products include hotel guestroom management systems, energy management systems, home automation, lighting control systems, electronic locking systems and electrical switch, LED lighting and accessories products.

The company has completed several projects in Singapore such as the refurbished Capitol Building, South Beach Hotel and Leedon Residence.

For more information, visit [www.eurekasingapore.com.sg](http://www.eurekasingapore.com.sg).



Nigel Chow, Sales & Marketing Support, Eureka Technologies Pte Ltd (extreme right) and his colleagues.

## CasaDigi

CasaDigi is a smart home technology that proved its mettle at the world's best hotels.

While selecting technology for smart homes, the choice is between technologies that may work and those that HAVE worked. CasaDigi cut its teeth in the demanding environs of the world's best hotels, 24x7x365! And having passed that test flawlessly, is now available as the last word in smart homes.

CasaDigi is the latest creation of the company that brought DigiValet - the smartest guest room solution for Hotels. DigiValet is adapted at some of the best hotels: The Armani at Burj Khalifa, The Corinthia London, Madinat Jumeirah, The Oberoi, The Torch, The ITC Grand Chola being some of them.

"CasaDigi integrates everything inside your home and reduces it to the palm of your hand. Seamlessly allowing you to control televisions, music banks, movie banks, lighting moods, climate control, curtain control, surveillance cameras and door locks. And continues to do so every day, every time," said Ashish Tijare, V.P. Business Development, CASADIGI.

**For more information, visit [www.casadigi.com](http://www.casadigi.com).**



**Ashish Tijare, V.P. Business Development, CASADIGI**

## Terreal

Terreal, a global leader in terracotta building materials, showcased solutions for roof and façade.

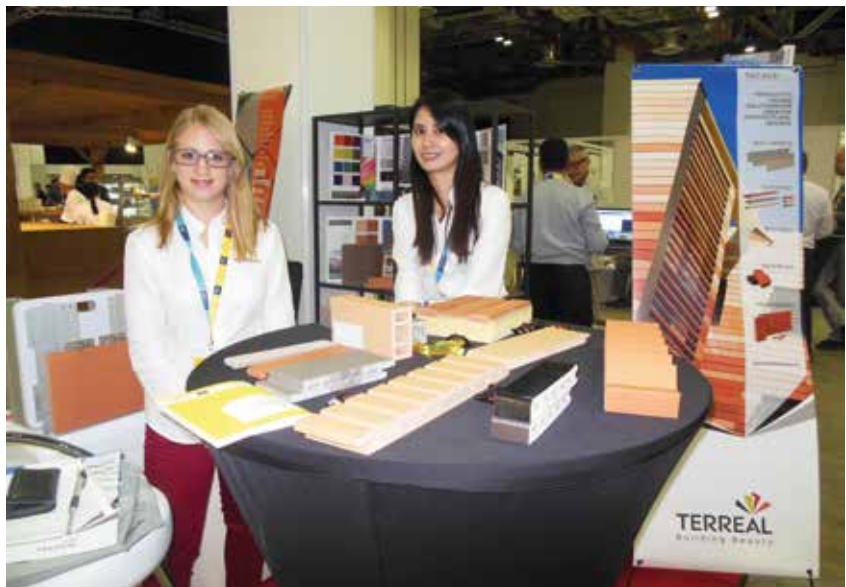
Terreal design, produce and market innovative solutions for the building envelope, inspired by over 160 years of unique expertise in terra cotta building materials. From small plain tiles to larger format tiles and from the venerable Barrel tiles to the latest Mediterranean profiles, Terreal's clay Roof tiles offers a wide choice of unique colours and shapes.

In wall cladding, Terreal is well known as a leading façade solutions provider. The most notable characteristic of Terreal's cladding tiles is their fine finish, as the company uses one of the best raw materials available in the industry.

"Apart from the wide choice of colours and shapes, Terreal building materials are environmentally friendly as our products are durable, 100 percent natural and recyclable" said Julie Deveyer, business development manager, Terreal.

Terreal products have been installed in several projects in Singapore. They include the MAD Museum at Tanglin Road, a church on Bukit Timah Road, The Cathedral of the Good Shepherd Church, private house in Jalan Kembang Melati, condominium in Nassim Road, private bungalow in Sentosa Cove, private house in Palm Drive, etc.

**For more information, visit [www.terreal.com.sg](http://www.terreal.com.sg).**



**Julie Deveyer, Business Development Manager (left) and her colleague Lynn Lee, Sales & Specification Executive, Terreal.**

## EQUITONE Asia Pacific

EQUITONE Asia Pacific participated in the World Architecture Festival 2015 as a Bar Sponsor. The company, which is known for its high-quality and high-performance architectural façade materials, showcased its solutions to the visitors.

The fibre cement facade materials of EQUITONE give an authentic character to the facade of the buildings. Expressive surfaces, through colour, natural and mineral aspect are the main characteristics of the EQUITONE architectural facade materials. "EQUITONE material gives a very natural concrete look, something that architects prefer to use for aesthetic reasons," said Gilles Hemery, regional cladding manager – Asia Pacific, Eternet Asia Panels.

Every EQUITONE material is unique, subtly displaying the raw texture of the core eternity fibre cement material. The material comes in a large panel size and can be transformed into any size or shape in the workshop or on site. No matter what design options you explore, EQUITONE's through-coloured nature gives crisp, monolithic details.

Building upon the century-long knowledge of the Etex Group, their technical and sustainable properties are outstanding, says the company.

EQUITONE has an office in Singapore and has appointed sales persons to promote the materials in Malaysia, Singapore, Hong Kong and Indonesia. EQUITONE has also established a network of partners in all South East Asia. EQUITONE is available in Singapore through its partner Welmate.

**For more information, visit [www.equitone.com](http://www.equitone.com).**



**Gilles Hemery, Regional Cladding Manager - Asia Pacific, Eternet Asia Panels**

## Sonimetal Debbas China

Sonimetal Debbas China, a member of the multinational Lebanese Group Debbas, is a high-end architectural and custom-made lighting with a presence in China and France. The company opened its office in China (Shanghai) about four years ago and has already been awarded and is currently delivering to site custom-made fixtures package for the Haramain High Speed Train stations in Saudi Arabia.

According to Sonimetal, these projects have very demanding specifications and requirements led by Foster + Partners, Buro Happold with Dar Al Handasah as engineering consultants. "We are providing custom-made architectural lighting to this prestigious project which is almost 99 percent completed," said Daniel Decombe, general manager, Sonimetal Debbas China.

Apart from the Shanghai office, Sonimetal also has branch offices in New Delhi, Mumbai and Bangalore.

"We hope to work on more projects around the world. We have been already involved in several projects in Saudi, Kuwait, Qatar and China. We are here to meet the needs of architects and lighting designers and want to show them our skills and convince them to work with us," added Daniel.

**For more information, visit [www.debbas.com](http://www.debbas.com).**



**Daniel Decombe, General Manager (right), Sonimetal and his colleague.**

## Sto

Sto also exhibited in WAF 2015 and was the sponsor of the Arcaid Architectural Photography Award, which was judged as part of the WAF 2015.

Arcaid Images is a photographic resource representing images from all aspects of the built world, ancient and modern, iconic and ordinary. The Arcaid Images Architectural Photography Award aims to put the focus onto the skill and creativity of the photographer.

This year WAF 2015 attracted about 770 entries from all over the world and only 20 images were shortlisted from the entries for the competition. Visitors to WAF 2015 were then asked to vote for their favourite photo from the 20 photos. "We have exhibited the photos of the 20 entries here and every visitor who comes to our booth can vote for the photo that they like the most," said Richard Walker, Market Development, Head of International Project Management, Sto SE & Co. KGaA.

This is the third time that Sto is sponsoring the competition. This year Fernando Guerra's image of EPFL Quartier Nord, Ecublens, Switzerland won the top prize of \$3,000.

For more information, visit [www.sto.com](http://www.sto.com).



Richard Walker, Market Development, Head of International Project Management, Sto SE & Co. KGaA (left) and Lynne Bryant, Director, Arcaid Images.



Sto's booth, designed by Spanish architecture firm, ERGO Studio, reflected the company's corporate philosophy: 'network' of 'global presence, local knowledge'.

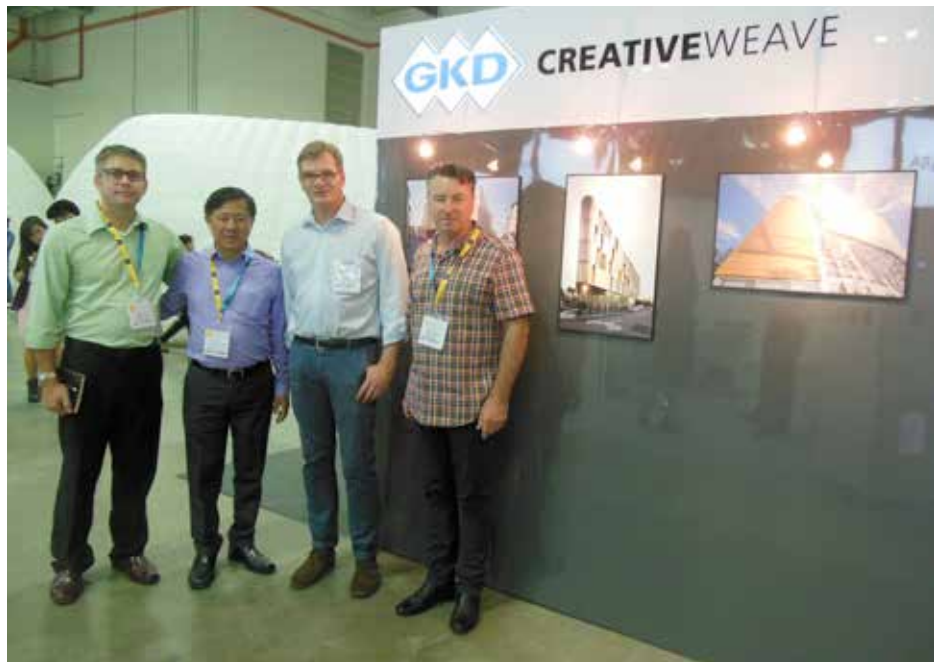
## Zenith Meshtech Pte Ltd

Zenith Meshtech Pte Ltd, a Singapore-based wire mesh company, is a distributor of GKD-Gebr Kufferath AG of Germany. GKD is a renowned industry leader in weaving of wire meshes made of metals and other materials, so-called industrial mesh, process belt mesh and architectural mesh.

The quality of GKD architectural meshes are based on decades of experience in manufacturing technical meshes for filtration and separation technology as well as process belt technology. The aesthetic qualities of metallic meshes make them attractive for use in architecture and design.

"We have carried out a couple of projects in Singapore using the GKD wire mesh. Notable projects include the Changi Airport Terminals 2 & 3 and more recently the refurbished Victoria Theatre & Victoria Concert Hall," said Raymond Lai, managing director, Zenith Meshtech Pte Ltd.

Apart from Singapore, GKD also has offices in China, United Kingdom, USA, UAE, South Africa and India. For more information, visit [www.gkd.de](http://www.gkd.de).



Raymond Lai, Managing Director, Zenith Meshtech Pte Ltd (second from left) and his colleagues.

## Bolidt Flooring

Bolidt, a flooring company from The Netherlands, specializes in resin flooring based on epoxy and polyurethane. Bolidt flooring has been used as industrial flooring, ship decks, sports flooring and wearing courses in road construction and in commercial and industrial buildings.

"Our product opens up a wide range of flooring possibilities for schools, hospitals, food & beverage, industrial and pharmaceutical. It can also be used outdoors and for landscaping," said Maurice L.J. Steijn, Bolidt Synthetic Products & Systems.

Bolidt has carried out a wide range of projects from all over the world by working closely with architects.

Bolidt flooring is durable, easy to clean & maintain and is environmentally friendly.

By choosing Bolidt flooring, customers are assured of superior quality and workmanship. This is because the company develops and produces its own raw materials. With employing their own application teams, Bolidt carries out a wide variety of projects all over the world.

"We guarantee quality for projects all over the world. Whether Europe or Australia, they will get the same quality of products from us," he added.

For more information, visit [www.bolidt.com](http://www.bolidt.com).



Maurice L.J. Steijn of Bolidt Synthetic Products & Products



16-20 Mar 2016  
World Trade Center Metro Manila (WTCMM),  
WTCMM East Wing A & B and the  
Philippine Trade Training Center  
Manila, Philippines

## WORLDBEX 2016 to focus on “Uniting Strong Foundations”



Photo: © WORLDBEX SERVICES INTERNATIONAL

**F**or the more than 20 years, WORLDBEX has led at the forefront of propelling the Philippines’ economic growth through its high-grade and comprehensive trade expositions aimed towards solidifying and nurturing the building and construction industry. 2015 proved to be a momentous year for the country as it hosted the visit of the Pope and APEC, showing that the Philippines is an up and coming player on the world stage. 2016 is no different as WORLDBEX, fresh from its 20th year celebration, wastes no time in furthering its advocacy of championing the Philippine construction industry as a worldclass economic sector.

As it takes on the task of “Uniting Strong Foundations”, WORLDBEX will once again gather the industry’s strongest and

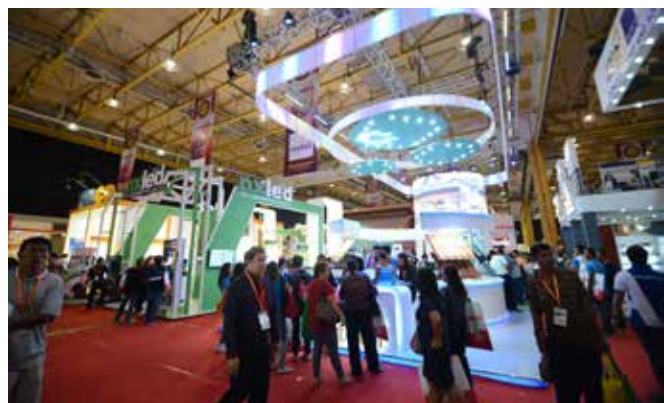


Photo: © WORLDBEX SERVICES INTERNATIONAL

most innovative players both locally and abroad – all for the main goal of uplifting the Philippines' economic progress by bridging gaps between various sectors as well as by providing a platform for the freeflowing exchange of relevant industry trends and insights.

Over the course of two decades, WORLDBEX has no less than proven its ability to grow and expand the building and construction sector from local to international acclaim. Among the companies who have continuously participated at WORLDBEX and have thus shown admirable success throughout the years include Pacific Paint (Boysen) Philippines, Mariwasa Siam Ceramics Inc., Eastern Wire Mfg. Inc., Emerald Vinyl Corp., Puyat Steel Corp., Puyat Flooring Products Inc., Wilsonart, and Multi-Rich. International companies have also taken notice of the potential for growth within the event with exhibitors joining from Malaysia, Vietnam, China, South Korea, Turkey, Taiwan, South Africa, UAE, Australia, Germany, Spain, Thailand, Singapore, Japan and the USA.

Freshly inspired and fiercely determined to vastly change the landscape of the construction industry in the name of progress and development, WORLDBEX is the vessel that will unite the strongest forces of the industry, both old and new, and elevate all of which closer to unprecedented success and prosperity!

WORLDBEX 2016 will take place from March 16 to 20, 2016 at the combined venues of World Trade Center Metro Manila (WTCMM), WTCMM East Wing A & B and the Philippine Trade Training Center in Manila occupying over 30,000 square metres of exhibition space with 1,000 different booths housing close to 500 companies, and is looking to break its record of 168,000 visitors in 2015.

Other highlights of the exhibition will include the Architect's Gallery and the Interior Designer's Gallery which will showcase the designs and portfolio of works of the country's top architectural and interior design firms. WORLDBEX Lab will feature some of the most innovative products from the Philippines' top construction companies. Also to be included are the Developer's Gallery, showcasing several big developers and their upcoming projects, Business Matching, where visitors are matched with exhibitors by their needs, and the WORLDBEX App which will make going through the event simpler and more convenient.

WORLDBEX Seminars will again be held concurrently with WORLDBEX 2016 to address global trends in construction, architecture and interior design in the areas of colours, designs, building materials, construction technology/methods, innovations, etc. Speakers will include, from the Philippines, Arch't Abelardo Tolentino, Jr., Engr. Bayani Y. Bueser, Arch't Paulo Alcazaren, Arch't Dan Lichauco, Arch't Prosperidad Luis, Arch't Cathy Saldana, Engr. Edilberto C. Palisoc, Arch't Annie Pugeda, Idr. Leo Almeria and from Singapore Arch't Ramon Martin, Arch't Michael Tan, Arch't Mike Lim.

**Pre-Registration is now open via [www.worldbex.com](http://www.worldbex.com). For more information on WORLDBEX 2016, tel (+63) 2 656 9239, fax (+63) 2 477 1899, email [info.worldbex@gmail.com](mailto:info.worldbex@gmail.com).**



Architect's Gallery. Photo: © WORLDBEX SERVICES INTERNATIONAL

## Ben's Windoors

Ben's Windoors, an advocate of sustainable green living, offers energy-efficient, green and eco-friendly products under 'Promote Green Living'. It also offers automated security system for homes and establishments.

The company's mission is to continuously develop and offer new items from Korea to the Philippine market that can contribute to the reduction of use of fossil fuels which causes global warming.

The company's Windows (uPVC) and Doors (ABS Doors & Steel Doors), combined with its window treatments, contribute greatly to the conservation of energy. Besides windoors, the company also offers natural wood and vinyl flooring and decorative moulding, automated security system and others.

Ben's Windoors also has a special product division, which is the Solar Department. The company offers solar photovoltaic power generating systems that generate power by harnessing the energy from the sun. The system can significantly reduce your electric bills and provide power to areas not served by utility grids. The company's products are made from Korean materials ensuring excellence in design and quality, durability, and functionality with affordable prices.

For more information, visit [www.benswindoors.com](http://www.benswindoors.com).



## Puzzlefit Furniture



The way we live in our home is an intimate relationship between our self and the surrounding. Interior setup can either provide a relaxing vibe or a dull and bland mood. That's why customising our home system frees us up from the shackles of daily life.

Puzzlefit Furniture is a local Philippine company. It provides custom modular system, solid surface solution and all other types of furniture for a tailored home. The company's factory, located at Valenzuela city, has highly industrial setup such as high-speed precision cutting, negative pressure paint room, solid surface production line, thermal forming and vacuum set up.

For more information, contact (+63) 2 361 9279 or 361 9640.

## CKT Infiniti Glass Inc.

CKT Tempering aims to be a dynamic leader in glass processing with the integration of innovative high performance glass and glazing solutions, with outmost service through highly professional and skilled human resources and customer service with healthy working conditions, energy conservation and credible business ethics.

The company aims to meet customer satisfaction on time. Through their knowledge based on experience and creativity, they consistently and transparently practice ethical standards in all they do. They also make sure to provide meaningful employment and support the general welfare of the community where they operate.

For more information, visit [www.oneglasssource.com](http://www.oneglasssource.com).



## Dealer's Choice Hardware Corporation



(Before) 100w Halogen



(After) SPA Electrics RETRO-Series (LED)

Dealer's Choice Hardware Corporation (DCHC) caters to the hardware and construction needs of contractors, developers, households and other potential clients providing the array of products that are quality and responsive to the demand of the changing market. With its team of dynamic staff, DCHC is soaring high to fulfill its commitment to its clients and suppliers by providing the best customer service and partnerships possible.

In 2014, DCHC put up its second branch located at 38 NBP Bldg. Aurora Boulevard, San Juan City, to enter in the distribution operations of the quality products of Australia based lighting company such as, CMP controls and Tridonic for the electronic drivers, SPA Electrics for pool lights and Bona Products from Sweden and Philips Lighting for LED. The new venture is now starting to penetrate in the market to fill the gap of needs for quality products for industrial and residential needs.

The SPA Electrics RETRO-Series, high performance LED pool lights suit the most major brands of existing lights on the market and with the company's patented electrical connection, installation is performed in minutes. Utilising advanced Ceramic Light Engine Technology, the RETRO-Series boasts greater illumination than a 100W halogen light while consuming less than 12 watts of energy. This saves you money and reduces carbon emissions by up to 90 percent.

For more information, visit <http://dchcorp.net>.

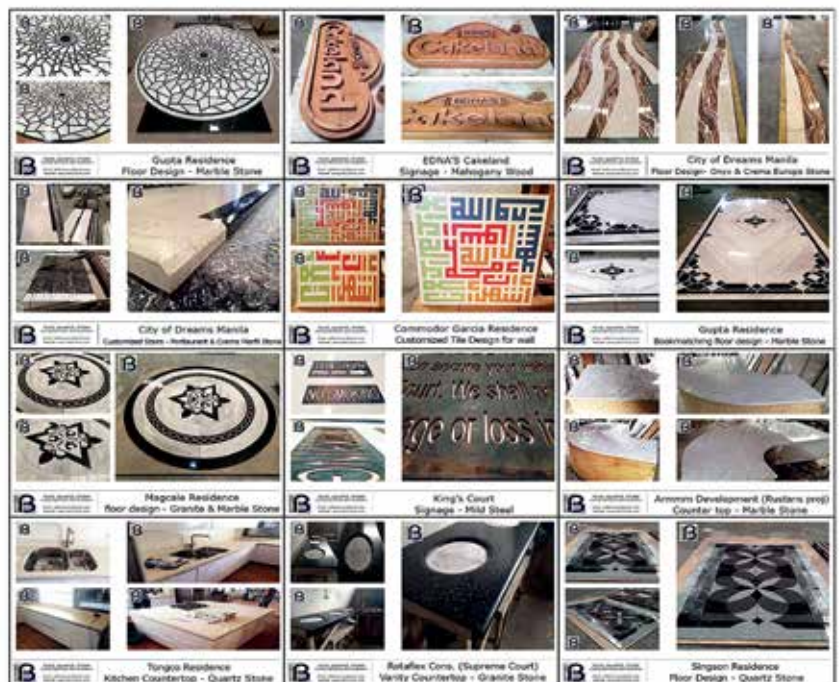
## Botticino Incorporation

Botticino Incorporation was established and registered in January 2010 to provide the best fabrication services for construction industry in the Philippines. The company's vision is to become one of the leading companies by giving first class fabrication services to its valuable customers and clientele, with the help of its experienced team leaders to run a company well equipped with (Automatic) machines which will help the company provide a better quality service.

As part of Botticini's commitment to provide the best quality service with the latest technology at cost effective prices with less time consumption, Botticino Inc. invested again in 2015 to bring a new fully automatic machine to cut tiles bigger than one metre in size.

With Botticino Inc, you can be confident that you can get top quality customised product at affordable prices and also have the support of trained, knowledgeable and motivated team of professional marketing consultant dedicated to your satisfaction.

For more information, visit [www.botticinoinc.com](http://www.botticinoinc.com).



## Wilcon Depot



For almost four decades, the brand Wilcon has become synonymous with homebuilding and quality materials. From once being a small hardware store with only a handful of people working and very limited product offerings, Wilcon has already established itself as a shopping destination for homebuilders, be them professionals or simply those who are in need of products to complete their homes.

Led by visionary and founder William Belo, Wilcon's function and operations is guided by its mission: to help people build, improve, and refine their homes for a sustainable and comfortable life. Despite the challenges and economic crisis the country and the industry face, Wilcon remains strong and determined to serve only the best to the Filipinos by offering the widest product selections, excellent services and innovative ideas essential in turning a vision into reality.

The company believes that to completely fulfill its mission, bringing Wilcon closer to where they are is a vital step to take, because wherever Wilcon goes, quality living and convenience follows. In 2015, Wilcon opened three new stores at Wilcon IT Hub Pasong Tamo Ext., Makati City, San Pablo, Laguna and Villasis, Pangasinan. With 35 operational stores, the nearly 40 year old company is looking forward to opening new idea-builder outlets at various cities and provinces in the country including Molino, Bacoor, Cavite, Sta. Rosa, Laguna, Bacolod City and Cagayan de Oro City carrying with it the efficient and sensible home solutions to Filipino homes and customer projects.

What makes Wilcon a preferred store by many industry professionals and home enthusiasts is the assurance that spending your time with Wilcon will result to productivity and enjoyment. Going inside Wilcon will inspire you to build and complete your home, help you choose the right products and let you feel that your own ideas are given with utmost importance and attention. To make this happen, Wilcon brings in its roster of locally made and internationally-recognised products that speaks innovation, functionality and excellence. While product choices are endless, Wilcon makes shopping an impressive experience through its clutter-free and categorically-arranged merchandise. The one-stop shop even pioneered the Design Hub, a feature that helps homebuilders create their own design through a computer software that provides cost estimates and product lists.

Now that Wilcon is gearing towards its fortieth year in the industry, a feat that signifies the huge amount of trust and confidence its clients and partners have given to them, the company remains relentless and dynamic to further innovate and create better ways of serving its purpose. While accomplishments and breakthroughs were already achieved, Wilcon keeps on challenging itself and works on finding new and fresh ideas to produce best results, enhanced customer experience and set new standards in the industry.

For more information, visit [www.wilcon.com.ph](http://www.wilcon.com.ph).

## LLumar Window Films

Since 2005, LTS Luminex Corporation is recognised as the exclusive distributor of LLumar® in the Philippines by CPFilms Inc, one of the world's largest manufacturers of window films. Since then, LTS Luminex Corp. has gained confidence in educating the market's need for window films.

The company's goal is to offer the complete window film portfolio, outstanding integrated services, and extensive warranty programmes, to make them greater in total value. The company's employees are distinguished by their functional and technical expertise combined with its applicator's hands-on experience, ensuring its customers with the most effective and professional service. Exceptional, functional and technical expertise coupled with extensive industry knowledge and experience makes LTS Luminex Corporation the ideal choice for a full service provider of window film solutions.



For more than 55 years, LLumar window films have been used to:

- Control the sun – providing protection from excessive heat and harmful ultraviolet rays.
- Lower energy costs – saving homeowners up to 40 percent on cooling costs and providing annual energy savings up to 15 percent in commercial buildings.
- Improve driving comfort; style and privacy.

For more information, visit <http://llumarphil.com>.

## Wilsonart

Wilsonart is one of the world's leading manufacturers and distributors of High Pressure Laminates and other engineered surfaces used in furniture, office and retail space, countertops, worktops and other applications. Wilsonart has achieved success through a combination of outstanding service, high-quality products and a focus on continuously redefining decorative surfaces through improved performance and aesthetics.

Wilsonart®HPL in 2016 is coming with many distinguished designs and textures to select from stunning Woodgrain, variety of Plain colours, luxurious look of Metal laminate and even your own unique designs. The full range of design consists of 339 and available in various textures. New designs this year are mainly wood grain and fabric designs. The company commits to high quality and great selection of designs.

Wilsonart is a global leader in decorative surfaces and delivers a broad range of high-quality products and services to the market. For more than 50 years, being a responsible member of the global community has been woven into its culture. Sustainability incorporates not only our impact on the environment, but also our long-term commitment to provide high quality products, reliable services, secure jobs and strong community support. The company's immediate goals are as follows:

- ZERO WASTE – Eliminate unnecessary materials, processes and waste from the products the company makes and sells
- ZERO IMPACT – Lead the industry in development and use of environmentally responsible materials.
- ZERO BARRIERS – Create an environment of excellence that fosters individual growth and engagement in community and industry development.

Wilsonart is available through its distributor Multi-Rich Homes Decors Incorporated in the Philippines. For more information, visit [www.wilsonart.com](http://www.wilsonart.com).



## Asia Pacific Project & Industrial Sales Corporation

Asia Pacific Project & Industrial Sales Corporation, located in Manila, Philippines, aims to give its customers good and high quality products with reasonable price. The company aims to be the first choice of dealers and consumers nationwide for Power Tool, Hand Tool, Construction Tool, Automotive Tool, Measuring Tool and Air Tool consumer hardware etc.,

The company was introduced in the Philippines in 2015. It is distributed in over 18 countries worldwide and is still growing.

For more information, visit [www.ingcotoolsphilippines.com](http://www.ingcotoolsphilippines.com) or [www.ingcotools.com](http://www.ingcotools.com).



## ACOUSTIC PANELS &amp; SOUNDPROOFING

## AURAL-AID

Aural-Aid Pte Ltd is a Singapore-based company specialising in acoustic panels and soundproofing under the brand name, Aural-Aid.

Aural-Aid's acoustic panels have several impressive features and benefits. It is fire-rated and eco-friendly, and also acoustically transparent and breathable. With the company's open frame technology, the acoustic frames are up to 81 percent lighter and have a total absorption surface of up to 80.6 percent greater. Aural-Aid has introduced a dual-membrane bass trap, which means that each of its bass traps is installed with a damp membrane and pressure membrane for maximum low frequency absorption. Aural-Aid employs an algorithm that is based on an empirically-tested data to derive optimum airflow resistivity unique to its acoustic panels and bass traps.

Aural-Aid has completed several projects in Singapore, one being the recent installation of the Aural-Aid acoustic panels at \*SCAPE Gallery in Orchard Road. \*SCAPE, an iconic building for the youths, had requested RSP Architects to build a mini-theatre to promote youth culture, as supported by the Ministry of Culture, Community and Youth. Aural-Aid was nominated as the acoustic consultant to build the acoustic panels for the gallery.

The acoustic panels were designed to be faceted in shape, where each panel has a different depth and angle. Some of the acoustic panels were made with a fabric finish and others with a wood face. The fabric panels were filled with 25mm low-Q sound absorbing substrate to act as absorbers. The panels with the wood face were angled so that they can be used as scattering plates. The combination of absorption and scattering creates an acoustic device that behaves like a large-scale binary amplitude diffuser.

This gives \*SCAPE Gallery enough absorption to tone down early reflections, yet maintain a certain liveliness in the mid-high frequencies to prevent it from sounding monotonous. After the acoustic panels were installed, an RT60 test was conducted. The results showed that the acoustic panels brought down the reverberation time from an average of 1,600m/s to 950m/s in the gallery.

For more information, visit [www.auralaid.com](http://www.auralaid.com).



\*SCAPE Gallery in Orchard Road



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Sales Team:

Mr. Eric  
T. +62 2556 5003  
M. +62 878 7700 2211  
E. [eric.antoniuss@reedpanorama.com](mailto:eric.antoniuss@reedpanorama.com)

Mr. Ricky  
T. +62 2556 5028  
M. +62 818 418 483  
E. [ricky.chandra@reedpanorama.com](mailto:ricky.chandra@reedpanorama.com)

Mr. Nicky  
T. +62 21 2556 5027  
M. +62 857 1019 7676  
E. [tjhuanicky@reedpanorama.com](mailto:tjhuanicky@reedpanorama.com)

For international inquiries:

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Fiam is a leading company in the production and distribution of high quality outdoor furniture with a particular eye on design and functionality, merging simplicity and comfort.

This year, Fiam celebrated its 40th anniversary presenting at the spoga + gafa trade fair in Cologne iconic pieces of its collection, ever since featuring distinctive characteristics such as durability, comfort and pureness in design.

Alongside with bestsellers such as Bitter, Fiesta, Amigo, Samba and Movida, the company presented LIDO, a product novelty in 2015, designed by Torsteinsen Design from Norway.

Inspired by 1950s public benches, the Lido collection is distinguished by its curved steel tube frame, which twists and turns to highlight the flowing silhouette of each variant: from the side to the armchair, and the high or medium-backed lounge chairs with their footstool. A number of upholstery options are proposed, from synthetic outdoor fabrics to so-called "spaghetti string" in pvc. Available soon in metal, wood and with plastic slats.

For more information, visit [www.fiam.it](http://www.fiam.it).



Photo: © Fiam

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Butterflies are beautiful and delicate creatures – and very climate sensitive. So when planners were designing the Konya Tropical Butterfly Garden in Konya, Turkey, they recognised it was vital to secure the best, most reliable means of maintaining stable heat and humidity in the museum.

That is why they turned to Guardian Industries' Glass Group in Europe, a leading manufacturer of high-quality commercial, residential, interior and automotive glass products, to provide the nearly 1,500 pieces of different-sized glass needed during construction.

Specifically, they selected Guardian SunGuard® SNX 60/28, which lets 60 percent of sunlight in but keeps out 72 percent of the sun's heat – allowing the temperature inside the building to be precisely regulated. The SunGuard eXtra selective (SNX) range is the highest performing solar protective glass Guardian has to offer. This glass also offers excellent aesthetics, due to its neutral transparent colour and its low reflection.

Ensuring a constant tropical climate of 26 °C and 80 percent humidity inside the glass-covered building was a particular challenge in Konya, which has a continental climate with large temperature swings between the winter and summer months. The construction area covered 380,000 square metres.

The museum, which opened in July 2015, features Europe's biggest butterfly flight zone of 1,600 square metres. Some 6,000 butterflies of 15 species and 20,000 tropical plants of 98 species live in the museum.

Guardian SunGuard glass not only helps to protect this rare and valuable plant and animal life, but it also makes for a more energy-efficient and environmentally friendly building. The Konya museum project received a LEED Silver certificate, making it the first museum in Turkey to be so recognised. (LEED is the Leadership in Energy and Environmental Design rating system, developed by the U.S. Green Building Council.) SunGuard products can help buildings to earn the LEED points needed to earn the much-coveted LEED certification.

The Konya Selçuklu Municipality worked with the international architectural and planning firm Arup on this project and hired the Akçim-Evçağ business partnership to handle the actual construction.

**For more information, visit [www.guardian.com](http://www.guardian.com).**





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CERAMICS WALL AND FLOOR TILES | REVIGRÉS



Chromatic Collection, which is an icon of Revigrés, were applied to the "greatest work of Gaudí" - La Sagrada Família Basilica. Photo: © Revigrés



Stairs using the Chromatic full body collection. Photo: © Revigrés

Formed in 1977, Revigrés is a renowned company in the world of ceramics, specialised in the production of full body porcelain wall and floor tiles (including double charge ranges), glazed porcelain wall and floor tiles and white body glazed ceramic wall tiles.

Revigrés full body porcelain, one of the most noble of the ceramic materials available today, is especially designed for use in high traffic public areas. Its resistance and aesthetic characteristics make it a reliable and appropriate solution for all types of use: wall or floor, interior or exterior, public or residential areas. Given its 100 percent porcelain composition, it has an extraordinary technical quality: almost null porosity, practically no water absorption and high resistance to stains and chemicals, resistance to thermal variations, high resistance to use, high mechanical resistance and easy cleaning and maintenance.

Presented in several collections, available in a wide variety of colours, formats and finishes, Revigrés full body porcelain has been distinguished with the Product Design Award in the scope of the national Design Awards.

The Chromatic Collection stands out with its range of 40 colours as one of the most complete collections worldwide in full body porcelain. It is an iconic Revigrés collection, distinguished with the exclusive development of several new colours on pieces applied in "Gaudí's greatest work"- the Sagrada Família Basilica - in Barcelona. Revigrés was awarded the international Red Dot Design Award 2015 with the Chromatic Collection, becoming the first Portuguese company in the wall and floor ceramic tiles sector to receive this recognition.

Revigrés offers a full range of ceramic products, presented in several formats (in cm):

- Full body porcelain wall and floor tiles: 60x60; 30x60; 15x60; 10x60; 5x60; 30x30; 10x10; 90x90; 45x90; 45x45; 60x120; 30x120; 15x120; 10x120.
- When necessary, the smaller formats can be obtained cutting from the larger, thus ensuring the same technical characteristics on combining the different formats.
- Glazed porcelain wall and floor tiles: 60x60; 45x45; 30x60; 30x30; 33x33; 14x90; 14,5x60.
- White body glazed ceramic wall tiles: 30x90; 30x60; 20x60; 30x45; 20x40; 20x20.

Revigrés full body porcelain makes it possible to develop several aesthetic effects – marble, shale, deck, wood, cement, metallic, mirror, among others – with excellent technical characteristics.

With presence in many countries, Revigrés has contributed to emblematic projects such as: the Harrod's in England; several computer stores in the USA and Canada; airports in Russia and Poland; subway and railway stations in Spain, Saudi Arabia, The Netherlands and England; hospitals in Kuwait and England; touristic projects in the United Kingdom, France and the USA; shopping centers in Slovakia, Ireland and Russia, among others. In Portugal, Revigrés has also contributed to several projects such as football stadiums, hotels, schools, restaurants and residential buildings.

For more information, visit [www.revigrés.com](http://www.revigrés.com).

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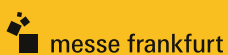


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## DYSON AIRBLADE™ HAND DRYER | DYSON

From cutting down trees, through chemical processes to disposal – using paper towels has a significant impact on the environment. Most used paper towels cannot be recycled. They have to be disposed of. Used paper towels, packaging and bin liner end up in landfill or an incinerator. Dyson Airblade™ hand dryers produce up to 79 percent less CO<sub>2</sub> than so some other hand dryers and up to 76 percent less than paper towels. Dyson Airblade™ hand dryers have a lower environmental impact across measures including carbon emissions and energy consumption. With a five year guarantee, the Dyson Airblade™ hand dryer is built to last. Even so, many components are designed to be recyclable with negligible environment impact.

### Dyson hand dryers are fast

Testing based on NSF Protocol P335 proves that Dyson Airblade™ hand dryers are fast. Every second, up to 35 litres of air is forced through apertures up to 0.8mm wide. The result – 690 km/h sheets of air that scrapes water from hands, drying them quickly and hygienically.

### Low running costs

Dyson Airblade™ hand dryers cost up to 69 percent less to run than other hand dryers, and up to 97 percent less than paper towels.<sup>1</sup>

<sup>1</sup> Pricing based on 2012 global averages. For calculations please visit [www.dyson.com/calcs](http://www.dyson.com/calcs)

### The problem with paper towels

Paper towels are expensive, have a high impact on the environment and cause extra washroom maintenance through mess and blockages. Dispensers are often found empty, leaving no way to dry hands; paper towels can create hygiene issues beyond the washroom.

### The problems with other hand dryers

Warm hand dryers are slow. Which means they're energy hungry, expensive to run and unhygienic. Dry times can take up to 43 seconds, so many users give up before their hands are dry – risking increased spread of bacteria. Jet dryers might look like a Dyson Airblade™ hand dryer, but when it comes to performance there is no comparison. Thanks to weak motors, most other jet dryers can't generate the fast airflow needed to dry hands quickly. They can also lack the power required to draw the air through a HEPA filter. So most other jet dryers aren't just slower than Airblade™ technology, they are less hygienic too.

### Dyson Airblade™ hand dryers are Hygienic

Warm air hand dryers use 60 year old technology that relies on evaporation to dry hands. Washroom air, which can contain germs from faeces, is heated up and blown onto people's shoes, clothes and freshly washed hands. Bacteria and viruses in washrooms can cause colds, flu, sickness, diarrhoea or worse. Dyson Airblade™ hand dryers, have HEPA filters installed as standard, which capture up to 99.9 percent of particles the size of bacteria and viruses in the washroom air. So hands are dried with cleaner air, not dirty air.

### Dyson Airblade Tap at The London Eye

The London Eye is one of the UK's most famous landmarks, welcoming over 50 million visitors worldwide since opening in March 2000. As a global engineering landmark, the out-dated conventional hand dryers in washrooms were not delivering the wow-factor to match the image. They also caused queues due to their long dry times. Thanks to a 12 second dry time of Dyson Airblade Tap, customers do not have to wait as long in the washroom as before, and they no longer leave with damp hands.

With Airblade™ technology in a tap, hands are washed and dried at the sink, so no water is dripped on the floor. Dyson Airblade Tap hand dryers deliver a much more stylish, simpler washroom experience that fits with The London Eye's cutting edge brand.

For further information, contact the Singapore Dyson office at tel (+65) 6479 5538 or visit the website [www.dyson.com/hand-dryers](http://www.dyson.com/hand-dryers).



## CONCEALED SLIDING DOOR SYSTEM | SLIDE & HIDE SYSTEM (S) PTE LTD

SLIDEHIDE is a factory prefabricated 3-D steel casing that integrates with a self-supporting tracking system to hide or conceal a sliding door inside the wall, thereby giving you an illusion that there isn't any door. SLIDEHIDE is the perfect solution in overcoming a tight space room layout design.

The patented 3-D casing is designed to replace a 100mm thick brickwall or a dry wall construction. Plastering, waterproofing material and wall tiles (if any) covering the adjacent wall will also cover the casing. Electrical switches/cables and water pipes can be fixed directly onto the casing surface and these fixtures can be embedded inside the finishes.

Designed and manufactured by a Singapore-based company since 1995, SLIDE & HIDE System (S) Pte Ltd is a leading manufacturer of SLIDEHIDE, a concealed sliding door system.

Over the years, the brand SLIDEHIDE had become well accepted by the real estate industry as a top-quality concealed sliding door system. SLIDEHIDE had been installed in Singapore, Malaysia, China, Japan, Dubai, Sri Lanka and other Asian countries.

SLIDE & HIDE System (S) Pte Ltd offers developers, architects and interior designers a wide range of SLIDEHIDE models to choose from for both wet and dry wall construction method, thus, allowing SLIDEHIDE to be widely used in applications ranging from bathroom, kitchen, walk-in wardrobe, lift lobby, etc.

With so many benefits and advantages, SLIDEHIDE offers a practical and affordable tight space solution for all residential, hotel and commercial projects.



For more information, please contact the company at tel (+65) 6369 9988, fax (+65) 6369 9977 or email [enquiry@slidehide.com.sg](mailto:enquiry@slidehide.com.sg). You can also visit the website [www.slidehide.com.sg](http://www.slidehide.com.sg).

## MUNDUS GLASS PATCH FITTINGS | DORMA

DORMA has launched a new range of glass patch fittings called MUNDUS. MUNDUS offers inspiring design combined with simple and fast installation.

### Optimum gap dimensions

Thanks to the variable, multi-dimensional adjustability of the patch fittings, the door can be optimally aligned following installation.

### Suitable for different glass thicknesses

Glass thicknesses of 8-12mm, 12-15mm, 15-19mm and 19-22mm can be each installed with a single, adjustable fitting. The extra gaskets that would otherwise have to be ordered are thus no longer needed.



### Easy to retrofit

MUNDUS can also be retrofitted to existing installations by simply replacing the patch fittings. Through its variability, it is able to cover the most common cut-outs used or required around the world, making it particularly suitable as a retrofit solution.

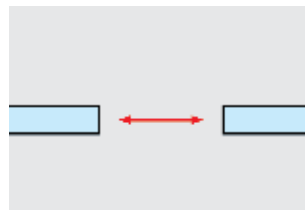


### Offering reliable retention, even for laminated safety glass

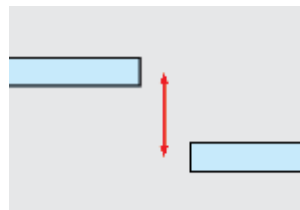
Mundus offers the DORMA Clamp & Glue technology for the installation of laminated safety glass. Additional adhesive bonding ensures a firm hold with the fitting permanently joined to the glass.



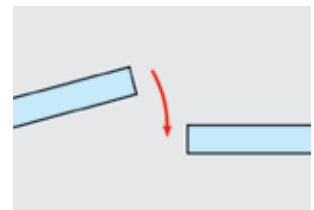
Optimum gap dimensions



Alignment in the X axis



Alignment in the Z axis



Zero position adjustment

For more information, contact [cheekeong.chan@dorma.com](mailto:cheekeong.chan@dorma.com) or visit [www.dorma.com.sg](http://www.dorma.com.sg).

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INTELLIFLO® VARIABLE SPEED PUMP | PENTAIR

**Go green and save more with Pentair.**

As a global leader in pool and spa equipment, Pentair has made a strong commitment to develop and offer the most environmentally responsible products available. The Eco Select brand is the keystone of this green programme that allows pool owners to save energy, reduce noise and contribute to a more environmentally responsible pool equipment system.

When you choose the Eco Select brand, you can be confident that your pool will provide peak performance and maximum energy saving, plus reliability, convenience and streamline maintenance.

IntelliFlo® variable speed technology is associated with the Eco Select brand and considered the world's smartest swimming pool pump. It helps to obtain maximum energy saving from your pool or water feature.

The concept behind the variable-speed pump is deceptively simple: configure a motor that does the least amount of work necessary to get the job done.

When Pentair® first introduced IntelliFlo® variable speed technology, it set off a marketplace revolution with its energy efficiency, near-silent operation and long service life.

With its ability to adjust speed, the IntelliFlo® takes full advantage of the scientifically proven Affinity Law: Cut the pump speed by half, and you cut power consumption by 87 percent.

Traditional pumps operate at set, unchangeable speeds. Those speeds are almost always higher than required. As a result, they overpower the jobs they are assigned to do, which wastes energy. The IntelliFlo® pump allows custom programming of optimum pump speeds for specific tasks such as filtering, heating, cleaning, spa jets and waterfalls. For virtually all applications, the optimum speed is lower than the preset, unchangeable speeds of older pumps.

Another advantage of choosing IntelliFlo® is the energy saving prospect. If you are thinking of how much energy can one IntelliFlo® variable speed pump save, the answer is very easy. Typical single-speed pumps can consume as much energy as all your other home appliances combined. IntelliFlo® pump uses less energy than the typical single-speed pump – savings that translate directly into money in your pocket.

Most pool pumps, even so-called "energy-efficient" models, still use the traditional technology of an induction-style motor. The IntelliFlo® pump uses an advanced permanent magnet motor – the same technology found in today's hybrid cars. Result: savings of up to 90 percent, even compared to "high-efficiency" single-speed and two-speed pumps.

Furthermore, IntelliFlo® pumps introduced a new level of quiet to the pump world. With their permanent magnet motors, totally enclosed fan-cooled (TEFC) design and low average operating speed, they are so whisper-quiet that you may not even know they are operating. But, the quantity of sound is only one measure of quietness. Sound quality is important, too. That's why Pentair engineered the IntelliFlo® pump's permanent magnet motor to virtually eliminate the unpleasant high-pitched noise found in other so-called "quiet" variable speed pumps—so you enjoy a more relaxing, satisfying pool and spa experience.

With IntelliFlo® pumps, you can even add equipment and features, or change them, without reducing pump performance and efficiency. Add a solar system or water feature, or change your filter. Just push a button to set the new optimum speed for the lowest energy use. You keep saving, even as your pool system changes.

To conclude, it is important to remember that the U.S. Environmental Protection Agency (EPA) has recognised Pentair's Aquatic Systems with a 2015 ENERGY STAR Partner of the Year award. In order for pool pumps to earn the ENERGY STAR certification, the pool pumps must be at least 30-72 percent more energy efficient than typical pumps.

Pentair, as a global leader in the pool and spa industry is committed to innovative technologies to maximise energy efficiencies.

For more information, contact Pentair Water Quality Systems at tel (+65) 6768 5903, email [Gaia.D'Incecco@pentair.com](mailto:Gaia.D'Incecco@pentair.com) or visit [www.pentairpool.com](http://www.pentairpool.com).



FIRE DETECTION CONTROL  
PANEL RANGE

## TYCO FIRE PROTECTION PRODUCTS

Tyco Fire Protection Products, a Tyco business, has launched the new ZETTLER PROFILE fire detection control panel range to meet a variety of market demands in the Asia Pacific Region. Aesthetically blending into any environment, from luxury hotels to schools, universities and hospitals, commercial multi-storey offices to large scale multi-site complexes, the PROFILE touchscreen user interface allows access to any part of the menu in only three easy steps. Once installed, the system can help improve efficiencies, reduce lifetime costs and fundamentally ensure the highest enhanced levels of fire safety. In addition, system owners and users who require access to manage the programming software can now do so with the release of a user-friendly version of the configuration tool.

The ZETTLER PROFILE is a new way of interfacing and managing all aspects of the renowned MZX Technology® digital addressable system, which delivers a range of unique benefits as part of an overall fire safety strategy. The new panel is totally backwards compatible with the existing MZX range, all of which can fully interface with the older legacy Minerva range meaning upgrading existing systems is easy, saving time and reducing installation costs. The system can also be updated in line with future advances in fire detection technology and can be easily expanded, allowing a capacity of up to 2,000 addresses per panel and up to 99 panels per network.

The ZETTLER PROFILE range of control panels is available from one to eight loops. The system can also be managed via a remote user interface, an 8-inch colour touchscreen with multi-lingual options. Up to 8 user interfaces can be used per panel. From an aesthetic standpoint, the contemporary and discreet touchscreens have been designed with a fully customisable home screen, which can be branded in-line with the building's corporate identity.

With an intuitive and intelligent design, the complexity of the system has been reduced to ensure on-going management of the

system can be completed efficiently. Furthermore, users can now ensure site and zone maps feature on the user panel helping to locate a fire alarm as quickly as possible and also save time and cost in locating any fault which might occur.

Simple to install, configure and service, ZETTLER PROFILE allows users to log on using the latest Radio Frequency Identification Technology (RFID) for fast and secure identification, instead of a traditional key. Engineers can configure the system with the required cause and effect programming, leaving the building occupier with the software necessary for the day-to-day management of the system. In addition, with a standard USB, extensive information can be downloaded - a key advantage when it comes to diagnostics and analysis.

"The launch of ZETTLER PROFILE represents the future of digital fire detection technology; providing power, reliability and the highest levels of fire safety to protect lives and reduce false alarms," explained Geoff Fiala, Director of Product Management for Tyco Fire Protection Products, APAC.

Besides VdS, EN54.13 and EN54.2 European approvals, PROFILE has also been approved by Singapore TUV - PSB: EN54 & Singapore Code of Practice: SS CP10:2005.

ZETTLER PROFILE is available in Singapore through Tyco Fire Protection Products. For further information, visit [www.zettlerfire.com](http://www.zettlerfire.com) or [www.tycofsbp.com](http://www.tycofsbp.com).



The new ZETTLER PROFILE fire detection control panel. Photo: © Tyco

## STONE MOSAIC | BENETTI STONE

Benetti Stone has introduced "Ricordi", a new stone mosaic made of more than 11,000 pieces per square metres, all handmade. Ricordi is a rich and precious collection, specially designed to add character to any room, from the living to the bathroom. Ricordi can be used alone or in combination with other high quality materials, as wood or Benetti stones. Many decorations are available in this collection but you can also create your own favourite pattern.

For more information, visit [www.benettistone.com](http://www.benettistone.com).



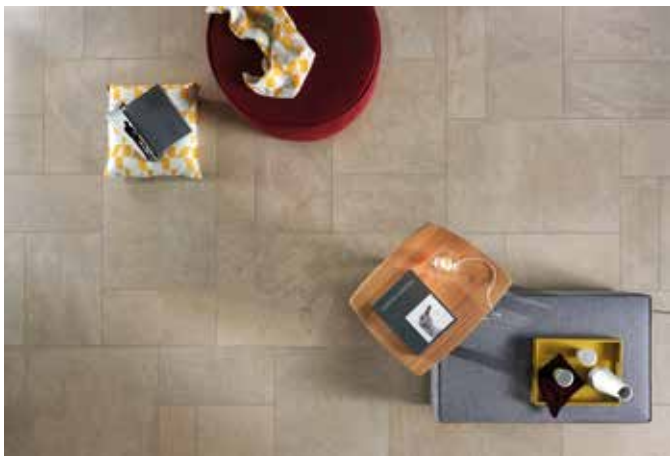
NEW TILES COLLECTION

LEA CERAMICHE

At Cersaie 2015, Lea Ceramiche launched five new collections of tiles.

**Stone effect surfaces**

Stone effect slabs that reproduce the veins and characteristics of stone. Different veining for each individual piece, artificial markings that overlay the consistency of the material. The essence of each collection is not in the single piece but in the movement created on the surface. As with the new Cliffstone collection, the interpretation of a rocky stone that does not exist in nature but has been reinvented creatively by Lea Ceramiche. The peculiarity of the design is defined by the presence of different finishes and the wide selection of sizes. The range of possible uses is easy to imagine especially by designers and confer a creative freedom in architectural design that ensures extensive personalisation. A finish, which is not particularly structured but soft and pleasant to the touch, characterises Grande Pierre. The source of inspiration of this collection is the world of traditional stones from France (Burgundy), Italy (Chianca) and Europe in general (compact limestones). The collection, in three basic warm and neutral tones, is characterised by natural edges for an aesthetic effect that recreates wear over time.



Cliffstone collection



Grande Pierre collection

**Wood effect surfaces**

Wood essences that time has altered, accentuating the edges and the structure. On both traditional and thin laminated porcelain, with warm or cold tones, digital printing reproduces shading, irregularities and inaccuracies with surprising realism. Characterised by its vintage style texture, Bio Recover is a reinterpretation of reclaimed wood retrieved from the antiques world. The introduction of the long plank format offers different installation possibilities due to the excellent flatness of the slabs. Having as a focal point the dimensional aspect, Wood-Stock Slimtech is available in ultra-thin and extra-large slabs. Advanced manufacturing techniques make it possible to create textured and lightly structured surfaces even on these thin slabs.



Bio Recover collection



Wood-Stock Slimtech collection

### Marble effect surfaces

Digital technology combined with the industrial processes, consisting of photographic testing, ongoing control and corrections to the brightness and depth of the material, have led to the re-release of one of the most valuable and sought-after marbles in nature, the white Calacatta marble. Presented in the thin version within the Timeless Marble Slimtech collection and in the traditional format in the Dreaming collection; the new graphics and chromatic variants replace the features and disadvantages of natural stone with the undeniable advantages of porcelain stoneware. Natural surfaces and the veins, which are always different, both in the gloss and matt finishes, ensure the Mimetic effect. Large sizes allow for extensive uniform surfaces, with a limited number of joints. There are numerous applications, both for walls and floors, for the Slimtech version in particular, such as exterior cladding of buildings and as a finishing surface for furniture.



Timeless Marble Slimtech collection



Dreaming collection

### Cement effect surfaces

The District collection reinterprets the essentiality of cement. Available in four colours with natural and grip finishes for outdoor spaces, District offers light movement on the surfaces to enhance a neutral and linear style with an industrial inspiration. The collection also includes a range of decorating elements made of graphic patterns that recall traditional designs. Geometric shapes or modern floral patterns can be combined with each other or be laid individually. The modular design allows the creation of multiple interpretative variations of the decorative theme.



District collection



System L2 collection

### 20mm

A large section is dedicated to thickened stoneware, the System L2 collection for outdoor applications, that has been enriched with new finishes and colours. From stone effect, to wood, to concrete, the collection is characterised by a wide and diverse variety of colours, including 18 shades, which widen its range of possibilities. The collection is ideal for high traffic areas. It can be installed with adhesives, using dry installation methods or on raised floors, that allow the passage of cables and pipes. System L2 ensures high technical performance and visual continuity between interior and exterior flooring. A considerable range of special pieces makes the collection suitable for swimming pools and for applications in large architectural projects.

For more information, visit [www.ceramichelea.it](http://www.ceramichelea.it).

CARPET COLLECTION | CERAMICAS APARICI



Two tonalities – Vestige and Sand – have arisen from the creation of this porcelain collection characterised by its modern designs and great variation among pieces. Warm and decorative: rugs have a major influence on the aura of any room and radiate homeliness.

This has been Ceramics Aparici's inspiration when designing these unique and exceptional pieces in sizes 100x100cm and 50x100cm which will exude elegance and zest for life anywhere in your home.

For floor and wall, Carpet can be featured in a kitchen, bathroom and living rooms alike. An additional touch of finesse comes in the shape of our décor piece finished in gold and a matching mosaic tile for wet areas.

For more information, visit [www.aparici.com](http://www.aparici.com).

PROTECTIVE COATINGS AND SPRAY FOAM | RHINO LININGS CORPORATION

Rhino Linings Corporation, a leading supplier and manufacturer of protective coatings and spray foam, has released "ThermalGuard™ CC2", ushering in their "next generation" of spray polyurethane foam insulation products. ThermalGuard CC2 has been formulated to adhere to the latest building fire codes for residential and commercial interior, exterior and below grade insulation.

"Our re-engineered 2-pound spray foam formulation is sure to stand out in a market saturated with options," said Pierre Gagnon, CEO and President of Rhino Linings Corporation. "ThermalGuard CC2 can safely be applied in lift thicknesses of up to 4 inches in a single pass with excellent control and a smooth finish, ultimately saving contractors on installation costs," he added.

In addition to its wide application window and temperature tolerances, ThermalGuard CC2 boasts a high single pass lift, low odour and one-step fire protection when applied in attics and crawl spaces.

The product can be applied in a wide range of environmental conditions without compromising the smooth seamless finish. ThermalGuard CC2 meets ICC-ES Appendix X requirements, providing fire protection without the need for an additional ignition barrier or intumescent coating in attics and crawl spaces. This one-step process reduces the number of passes required, saving contractors' time and money while achieving the same performance.

ThermalGuard CC2 joins the company's growing line of high-performance building products that include protective coatings, stucco, decorative concrete products, wall and roofing insulation.

For more information, visit <http://spf.rhinolinings.com>.





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SILICONE RESIN EMULSION | WACKER

WACKER has launched "SILRES® WH", a novel silicone resin emulsion for long-lasting wood protection coatings, possesses hydrophobic properties that reliably protect outdoor wood against wet and damp and the damage that these cause.

The product is flexible enough to adhere strongly to wood surfaces, and imbues them with the water-repellent properties typical of silicones. Weathering tests show that the product still protects impregnated wood against moisture and damp after 17 years.

The 50-percent emulsion is based on a functional silicone resin and can serve as a water-repellent impregnating agent or as an additive for formulating film-forming wood stains. Due to its hydrophobic properties, SILRES® WH reduces the water uptake of wood and keeps its water content low. Consequently, the wood is better protected against typical damage, such as fungus, mildew and insect attack, as well as cracks caused by swelling and shrinking.

The use of biocides can be slashed as a result. SILRES® WH added to paints and wood stains confers lasting water repellency, even in low concentrations. The water repellency is clearly revealed by the beading effect the emulsion produces on wood surfaces. The new product greatly reduces the frequency of renovation and repainting compared with conventional wood preservatives.

The SILRES® WH was first launched in Asia at the second Myanmar Build & Décor 2015 show in Yangon, Myanmar. For more information, visit [www.wacker.com](http://www.wacker.com).



Photo: © Wacker Chemie AG

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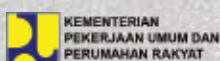
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