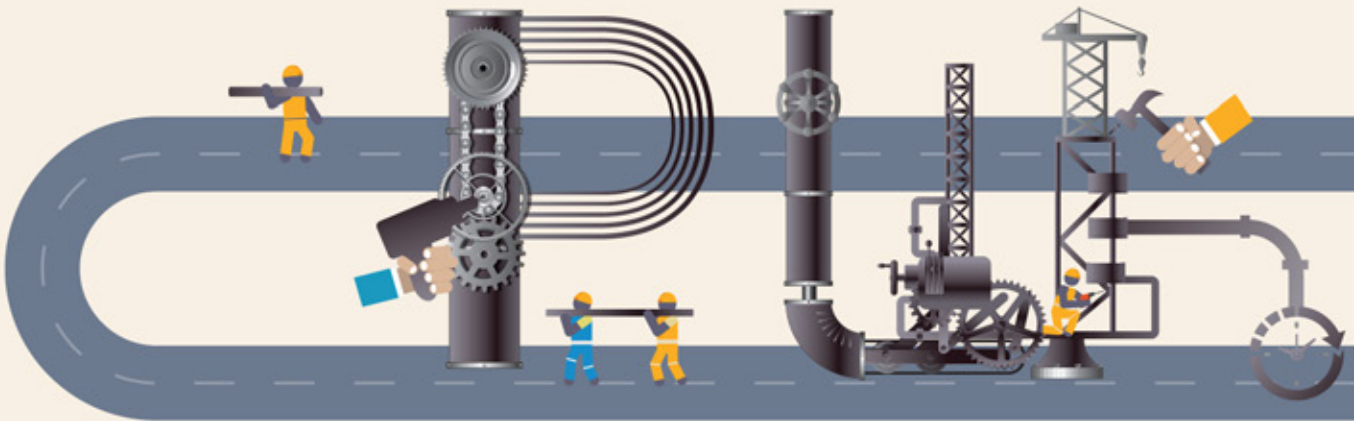


Pillars

WE SHAPE A SAFE, HIGH QUALITY, SUSTAINABLE AND FRIENDLY BUILT ENVIRONMENT | ISSUE 05/SEPTEMBER—OCTOBER 2013



SCPW 2013: BIM LEADS THE WAY



Pillars

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SPCW 2013:

BIM LEADS THE WAY

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IMAGE: SHUTTERSTOCK/THINKSTOCK

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START GREEN, BUILD GREEN, LIVE GREEN

Dear Readers,

The third quarter of every year is always an exciting time for BCA as we bear witness to two large-scale annual events that have become mainstays on our calendar – the Singapore Construction Productivity Week (SCPW) and the Singapore Green Building Week (SGBW).

The main message that was on our minds as we convened this year's SGBW was to share the strategic directions for the 3rd Green Building Masterplan. Industry watchers would have noted that the 1st and 2nd Masterplans had been a success as they had contributed to an increase in the number of green building projects in Singapore by a hundred-fold, from 17 in 2005 to about 1,700 currently. This translates to 47 million m² of Gross Floor Area (GFA), or 21% of Singapore's total building floor space.

Singapore is thus well on track to meet the national goal of greening 80% of Singapore's buildings by 2030.

BCA is not content to rest on our laurels. Our 3rd Green Building Masterplan will build directly on the success of the 2nd by bringing across a new focus – this time to inculcate a green mindset in our youths and community.

Not only are we getting much support from our local schools, offices and business establishments are also getting on the bandwagon to green their abodes. You can read about the BCA's pilot launch of an outreach programme called, "Tour of Green Mark Offices". Targeted at senior and mid-management executives and CSR personnel, the tour aims to create greater awareness of the benefits of working in BCA Green Mark certified offices.

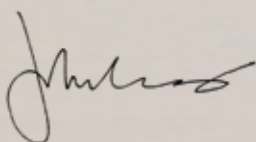
The programme kicked off with a visit to the JURONG Consultants Pte Ltd's office at The JTC Summit which saw 13 participants joining the tour to the office that was awarded the BCA Green Mark for Office Interiors (Platinum).

This is a sign that Singapore is ready to move into a new era when our people are more mindful of protecting the environment and adopting sustainable habits. This augurs well for the continued growth of our industry that thrives on having a regular inflow of new ideas, ideologies and innovations – developed by our local talents.

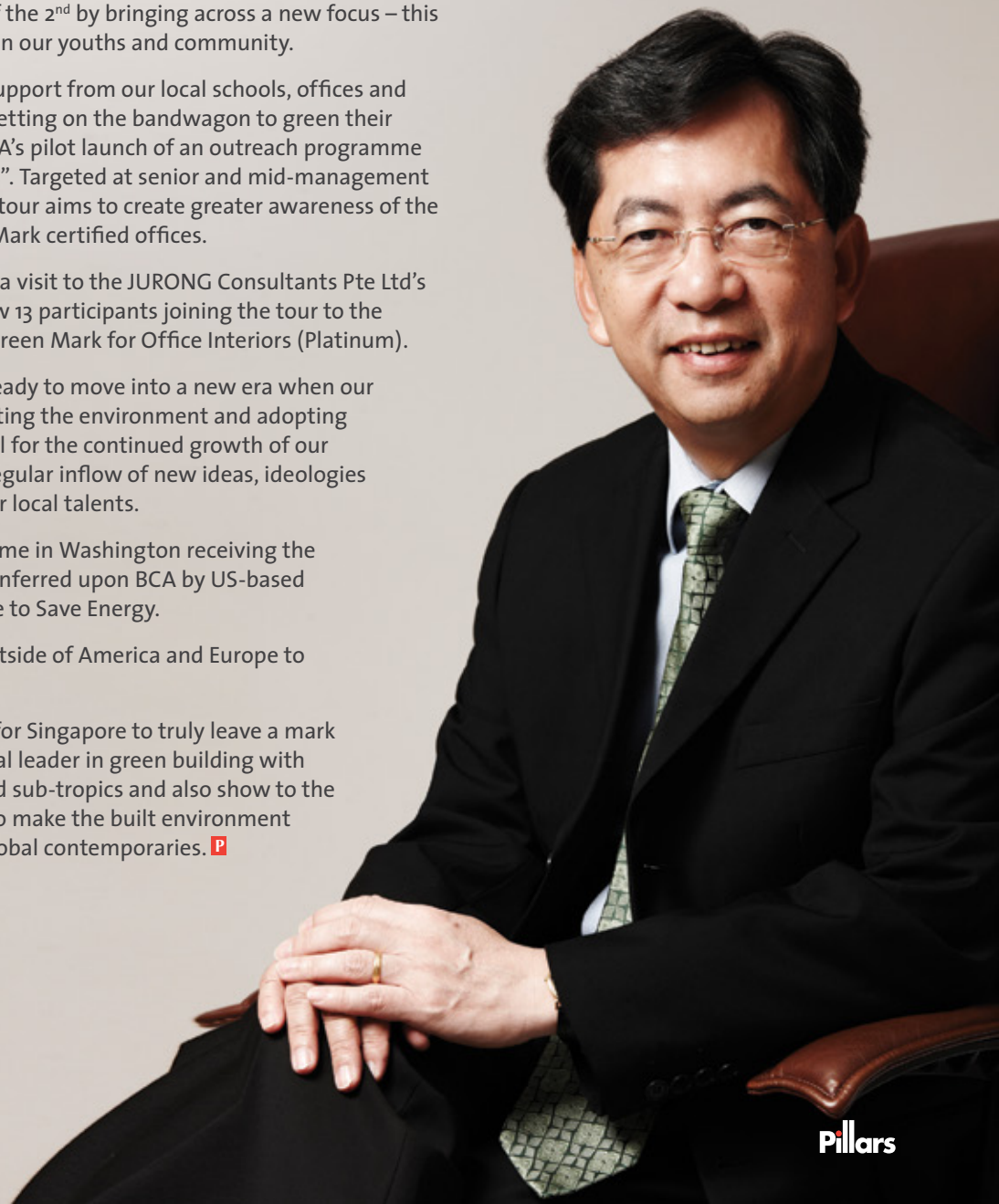
The month of October also saw me in Washington receiving the International Star (I-Star) Award conferred upon BCA by US-based energy efficiency coalition, Alliance to Save Energy.

Singapore is the first country outside of America and Europe to receive this award.

It is my hope that this is a start for Singapore to truly leave a mark on the international map as a global leader in green building with special expertise for the tropics and sub-tropics and also show to the rest of the world that our resolve to make the built environment more liveable is no less than our global contemporaries. **P**



Dr John Keung
Chief Executive Officer



SCPW 2013: BIM LEADS THE WAY

THE ANNUAL SINGAPORE CONSTRUCTION AND PRODUCTIVITY WEEK (SCPW) RETURNED IN 2013 AT THE SINGAPORE EXPO AND MAX ATRIA FROM 29 JULY TO 2 AUGUST, ITS THIRD ITERATION SINCE IT WAS LAUNCHED IN APRIL 2011



Top left | The key direction forward is to engage in continual development of young talents through scholarships and apprenticeships.

Top right | The annual SCPWs have always been graced by international speakers sharing their experiences and findings.

Left | Competitors proving their mettle against the best in the Skilled Builder Competition.

SCPW is a BCA hallmark, organised to turn the spotlight on productivity achievements and innovations in the construction industry.

The convention is an umbrella event that includes the BuildTech Asia Exhibition and the Build Smart



“The award is a testament to our progress in greening Singapore's built environment through BCA's Green Building Masterplan. With a robust plan that looks into all aspects of creating a sustainable built environment, I am confident that our vision of becoming a global leader in green buildings, with particular expertise in the tropics and sub-tropics, can be realised in the next few years.”

DR JOHN KEUNG, CEO OF BCA



Conference. It also hosts the Skilled Builders and Building Information Modelling (BIM) Competition and the International Panel of Experts' Meeting for BIM (IPE-BIM).

The inaugural BIM Mobile Apps Challenge is among the notable competitions leading up to SCPW 2013. BCA organised it to encourage more mobile application innovations that help building professionals and owners collaborate better with BIM.

The competition was held over two months with eight teams submitting written proposals. Six of these teams later developed their ideas into prototypes.

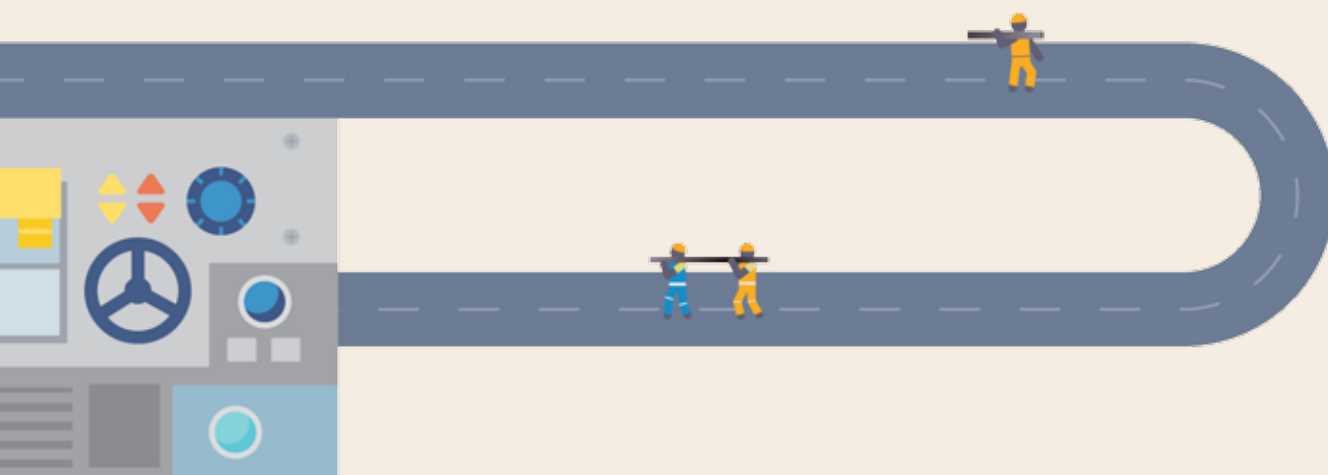
The winning team from Woh Hup (Private) Limited created a live communication platform between the BIM engineer, site engineer, and pre-caster that updates and retrieves information related to precast components. This helps to reduce costly project delays, as all parties can easily track information on precast components, construction sequences, production scheduling, and quantities of components used.

BCA also had its own pavilion that displayed the latest BCA initiatives and showcased the latest in construction technologies such as the MakerBot Replicator – a desktop 3D printer that can produce physical models and product prototypes in a fast and efficient manner.

Pillars made a visit to the Singapore Expo to bring you snapshots of the five-day event. Check them out here! [P](#)

Left | Dialogues between the top brass of the industry are essential in the growth of the sector.

Bottom | Participants of The Productivity Race.



ATTRACTING THE YOUNG TO THE BUILT ENVIRONMENT SECTOR

THE BCA-INDUSTRY BUILT ENVIRONMENT SCHOLARSHIP AWARD CEREMONY 2013 WAS HELD ON 2 AUGUST AT THE RAFFLES CITY CONVENTION CENTRE

BCA and 45 built environment firms awarded a record 166 undergraduate and diploma scholarship awards at the ceremony, a 50% increase over last year. This is a portion of the record number of more than 500 scholarships, sponsorships, and apprenticeships that BCA expects to award this year at the undergraduate, diploma, and ITE levels, injecting new blood into the built environment sector.

What is even more heartening is the rise in the number of women entering the sector. Almost half of the recipients of the BCA-Industry Built Environment Scholarship 2013 are women, double the number in 2010. With increasingly conducive working environments facilitated through off-site prefabrication and technology adoption, the sector is set to welcome more women.




Left | BCA-Industry Built Environment Diploma Scholars 2013.

Bottom | BCA-Industry Built Environment Undergraduate Scholars 2013.





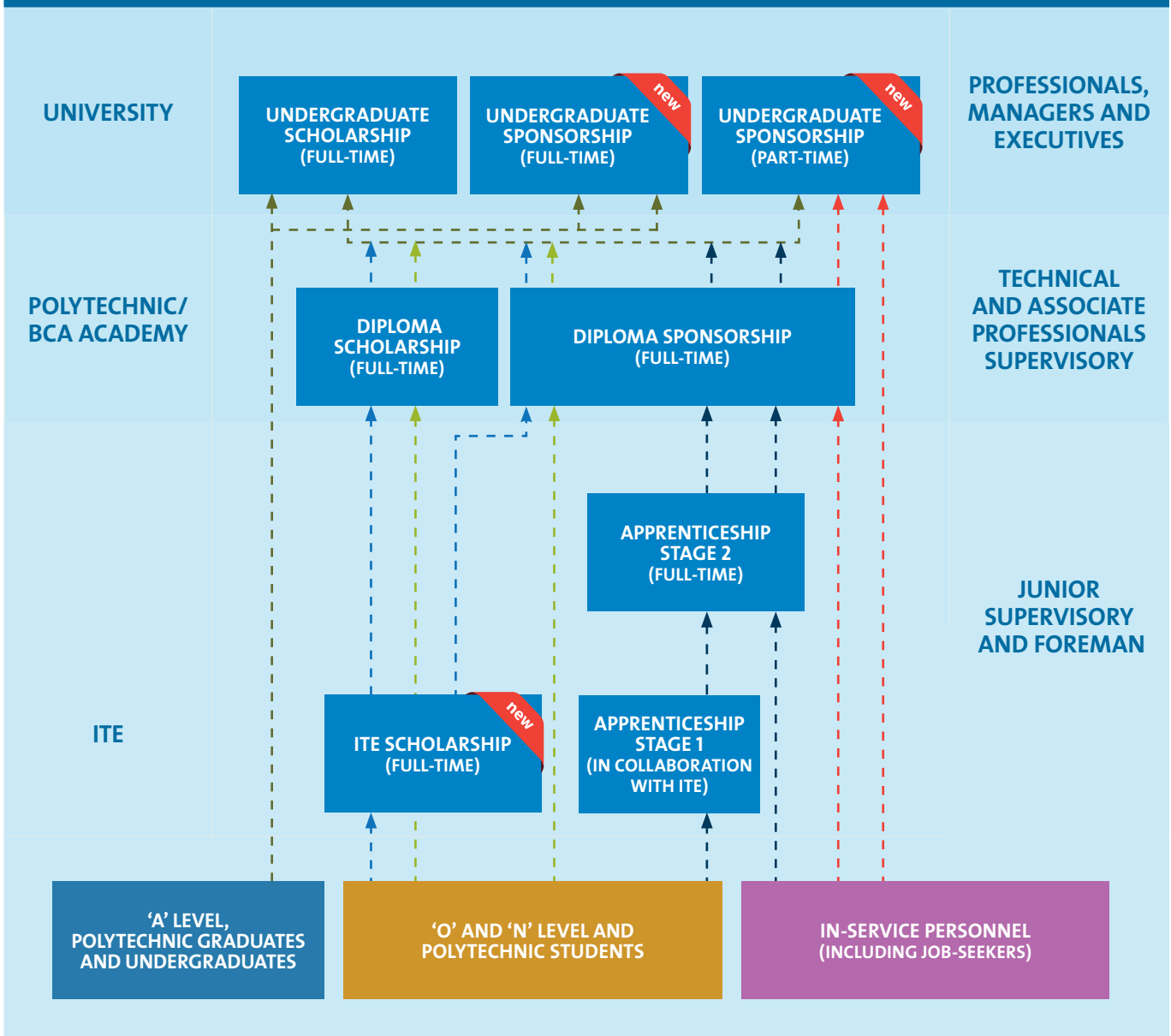
Today, the sector is advancing, offering good career prospects and opportunities in abundance. Young scholars will play a key role in transforming the built environment sector by championing green buildings, adopting advance-construction technology for higher productivity, and delivering a user-friendly built environment for a rapidly-ageing population.

To ensure the future of the built environment industry, we need build strong leaders in our industry today. There has been no better time to attract young talents, and have them benefit from BCA's suite of manpower development schemes, known as the 7-ships. 

Left | Our future leaders.

Bottom | BCA's suite of scholarship, sponsorship and apprenticeship programmes.

MANPOWER PROGRAMMES AND PROGRESSION PATHWAY



DOTZ AND HEXA VISIT AMK HUB!

THE WEEKEND OF 19 TO 21 JULY SAW THE DYNAMIC UNIVERSAL DESIGN (UD) DUO OF DOTZ AND HEXA POPPING BY AMK HUB. AMK HUB AS PART OF BCA'S ONGOING CAMPAIGN TO SPREAD THE UD MESSAGE IN THE HEARTLANDS

Once again, the mini-neighbourhood was equipped with myriad UD facilities and features where our mascots live. This time around, Mr Chan Chun Sing, Acting Minister for Social and Family Development and Senior Minister of State, Ministry of Defence, launched and toured the second UD Exhibition.

Mr Chan was also on hand to present the trophy and Certificates of Merit to the UD Inter-School Tournament winners. The tournament required students from various secondary schools in Singapore to answer an online quiz. The school with the most number of correct entries won. Mayflower Secondary School emerged at the top of the competition.

And what is a successful exhibition without interaction? Visitors to Yoodee Town had the opportunity to experience first-hand various UD features in different spaces. They were also able to test their knowledge of UD with the Yoodee Town Passport, and win limited edition Dotz and Hexa SPORK sets!

Stay tuned for more of Dotz and Hexa's escapades as they move through Singapore's heartland and shopping malls with two more exhibitions planned for 2014!

Meanwhile, do drop by our "Unify to UDify" Facebook page and pledge your support for this campaign to make Singapore a liveable and accessible modern city. **P**



Top right | Mayflower Secondary School students posing with Dotz and Hexa.

Bottom right | First prize winners, Mayflower Secondary School being presented their prize at the UD roadshow.



START BEING GREEN WHEN YOUNG

PROMOTING SUSTAINABLE DEVELOPMENT AND BELIEVING THAT A SUSTAINABLE MENTALITY STARTS FROM THE YOUNG

To educate the young, BCA launched the Greenovate Challenge to encourage secondary students to think of green building solutions and apply them in their schools.

The competition generated much interest from 14 schools, with students looking for innovative measures to save energy and water for their schools.

Coming in first place, Marsiling Secondary School students worked with the Energy Service Company assigned to audit their energy usage. This practical industry tie-up with gave both students and teachers an opportunity to learn from real world experts about energy-efficient strategies and consumption.

Guided by the school's energy audit, students came up with the practical solution of adopting solar leasing, where photovoltaic panels were rented to harness the sun's energy. The energy harvested was then used to offset part of the school's electricity needs. The school worked with a commercial partner to install, pro bono, a large quantity of solar panels and procure the solar energy harvested at a reduced rate, an arrangement that made financial sense.

The students also experimented with pre-cooling ambient air for greater air-conditioning compressor efficiency. The school experienced over 30% energy savings! For schools with extensive air conditioning usage, this can translate into S\$60,000 savings yearly.

Another winning factor for Marsiling Secondary was their innovative way of harvesting rainwater. The students joined 10 one-cubic metre recycled plastic containers with PVC pipes to create a water storage area. The school can harvest 1,371 m³ of rainwater for gardening and washing of toilets per year, and has further plans to increase the capacity of the system.

As one student whom I chatted with said, "Mother Earth is ours, therefore we have a responsibility to look after her."

Inspired by the inaugural BCA Greenovate Challenge, Marsiling Secondary will be applying for BCA's Green Mark certification for Existing Schools.

BCA plans to make the Greenovate Challenge an annual programme. **P**



Top | Minister Khaw Boon Wan being taken on a tour by the teachers and students of Marsiling Secondary.

Bottom | A display showing how rainwater is harvested.

Adapted from Minister Khaw Boon Wan's blog entry at <http://mndsingapore.wordpress.com/2013/08/13/start-being-green-when-young/>

NEW ACCESSIBILITY CODE FOR A MORE INCLUSIVE SINGAPORE

THE MOVE TOWARDS A MORE INCLUSIVE SOCIETY HAS BEGUN WITH THE RELEASE OF THE NEW CODE ON ACCESSIBILITY FOR THE BUILT ENVIRONMENT, OR THE ACCESSIBILITY CODE 2013 FOR SHORT

The Code encompasses an entire set of requirements that building owners and professionals have to follow, so that our buildings and public spaces meet a minimum standard of accessibility.

For the first time, the Code includes requirements catering to families, the elderly, and persons with disabilities.

Dr John Keung, CEO of BCA said, “We want the new Code to support the Government’s efforts in building an inclusive society. Improved accessibility will offer better quality of life not just for persons with disabilities, families with young children, and the elderly but also for all of us who may be caregivers or relatives to those who have special needs.”

From 1 April 2014, new projects and existing buildings that undergo Additions and Alterations (A&A) will have to follow the new Code when they are submitted to BCA for regulatory approval.

The seven-month grace period is to allow developers and owners enough time to integrate the new requirements into their building and renovation plans.

TOWARDS A FAMILY, ELDERLY, AND DISABLED-FRIENDLY SOCIETY

To bring about public spaces that are more inclusive to families, especially those with young children, the Code will stipulate that public buildings and spaces are to have nursing rooms, toilets that young children can use, and family car parking spaces.

For the elderly and persons with mobility issues, the Code will drive the

inclusion of more toilet cubicles with grab bars.


The focus on persons with disabilities was also increased with mandates on wider corridors, non-slip strips on staircases and a hearing enhancement system, among others. Also, the visually impaired can now find their way in a building or public space with Braille directions included at key locations.

LISTENING TO THE VOICES OF THE PEOPLE

The new Accessibility Code is a culmination of work, three years in the making. A committee comprising representatives from government agencies, industry associations, and voluntary welfare organisations came together to create it. At the end of 2010, they reviewed the Code for the fourth time since it was first introduced by BCA in 1990.

When the first draft of the Code was completed in April 2013, BCA embarked on a month-long public consultation, inviting Singaporeans to give their feedback and suggestions.

“We would like to thank the Tripartite Review Committee for their hard work in reviewing the Code so that it benefits many Singaporeans and covers many aspects of our built environment.”

“Our appreciation also goes out to Singaporeans and other voluntary welfare organisations that engaged us during the public consultation. Their views were valuable and constructive in helping us improve the Code so that Singapore becomes a friendlier place for everyone to live, work, play, and learn,” added Dr Keung. 





DESIGNING BUILDINGS THAT LAST

TWENTY-THREE GRADUATES DONNED MORTAR BOARDS AND RECEIVED THEIR POSTGRADUATE DEGREES IN SUSTAINABLE BUILDING DESIGN AWARDED BY THE UNIVERSITY OF NOTTINGHAM IN A CEREMONY HELD AT ORCHARD HOTEL ON 16 JULY



The Master of Science in Sustainable Building Design is a joint programme between the University of Nottingham and BCA Academy. It is a multidisciplinary postgraduate study programme tailored to the specific needs of green built environment professionals in the region.

The curriculum emphasises the importance of adopting an integrated approach to sustainable building design and its associated technologies, addressing the needs of the profession at large.

This includes passive/bioclimate design, urban design, renewable energy technologies and solutions, energy efficient services and systems, computer modelling and simulation, and total building performance solutions.

The two-year part-time programme is taught by lecturers from the University of Nottingham and supported by local industry professionals. Modules were delivered through intensive four-day teaching blocks at the BCA Academy campus in Singapore.

“It is very encouraging to learn that the participants and graduates are able to apply the knowledge acquired to the projects they are handling...[in fact] two of the past graduates of this Master’s Degree programme won the Green Building Individual Commendation Award conferred by BCA and the Singapore Green Building Council earlier this year,” announced Dr John Keung, CEO of BCA, during his address.

The graduand group achieved outstanding results, with half of the graduates being awarded distinctions and merits.



Top | “We need to create awareness, change mindsets and, more importantly, build up a pool of green collar workforce to support the green building movement in Singapore,” said Dr John Keung, CEO of BCA.

Bottom | Professor Graham Kendall congratulating graduates in his speech.

“The University of Nottingham is ranked among the top 1% of all universities worldwide. It is good that BCA Academy is partnering with such a high-standing university to offer the Master’s Degree programme in Sustainable Building Design locally. This holistic programme teaches students how to design a green building integrating both architectural and engineering aspects. I have also learned to use software tools such as energy modelling and day-lighting simulation in this course. It is an enriching programme for those interested in learning about Sustainable Building Design,” said Ms Alice Goh, a graduate of the programme. **P**

GREENING OFFICE SPACE

BUSINESSES WORLDWIDE ARE GIVING INCREASING CONSIDERATION TO GREEN BUILDING PRACTICES AND PROVIDING A MORE SUSTAINABLE WORKPLACE



Top right | Dr Uma Maheswaran sharing JURONG Consultants' greening journey.

Above | Participants on the guided tour of the office.



“The tour is very informative and engaging. Hearing first-hand about JURONG Consultants’ office greening journey was interesting.”

MR DESMOND CHUA, GENERAL MANAGER OF KEPPEL CLUB AND TOUR PARTICIPANT

On top of substantial utilities savings, going green can also boost an organisation’s image and improve workplace productivity.

To ride on this growing trend, BCA launched a pilot outreach programme, “Tour of Green Mark Offices”. Targeted at senior and mid-management executives and CSR personnel, the tour aims to create greater awareness of the benefits of working in BCA Green Mark certified offices.

Each tour has around 15 participants visit an office that has attained BCA Green Mark for Office Interiors certification. To begin with, visits to six exemplary offices will be organised.

The inaugural tour was held at the offices of JURONG Consultants at The JTC Summit on 22 July 2013. Some 13 participants were present at this tour of the BCA Green Mark for Office In Platinum certified office.

Dr Uma Maheswaran, Vice President of JURONG Consultants, was there to host the participants. He shared the company’s greening journey and implementation strategy, including how staff contributed to the greening process. His presentation also covered how going green has benefitted both the company and its employees.

After the presentation, Dr Maheswaran gave the participants a guided tour, highlighting the various green features in the office. The participants were very enthusiastic, asking many questions along the way. The result was a highly interactive and engaging tour. **P**

Photos were taken at JURONG Consultants’ Green Mark Platinum certified office.



IMAGE: ISTOCK/THINKSTOCK

SAFEGUARDING PROPERTIES FROM LANDSLIDES

PROACTIVE STEPS FROM PROPERTY OWNERS TO MAINTAIN THEIR RETAINING WALLS OR SLOPES ARE IMPORTANT IN ENSURING THEIR PROPERTIES ARE SAFE



“Increased or prolonged rainfall, coupled with poor maintenance, can easily result in serious damages and safety risks. It is, therefore, important to carry out regular pre-emptive checks, and engage a Professional Engineer for advice on appropriate measures to strengthen the slopes and retaining walls.”

MR ONG CHAN LENG, GROUP DIRECTOR OF BCA

Top left | Cracked and tilted retaining wall at a bungalow.

Bottom left | Landslide at Yio Chu Kang Road.

Top right | Residents were all ears during the outreach session.

On 22 June 2013, BCA organised a second public outreach programme at Bukit Timah Community Centre, and invited the residents of landed properties in the Eng Kong Cheng Soon, Mayfair Park, and Binjai Park estates to attend.

During the presentation, case studies of past retaining wall and slope collapses, including the extensive and costly rectifications works undertaken by the owners as a result, were shown. Residents were also reminded not to procrastinate and to take proactive steps to ensure their retaining walls or slopes remain safe.

When dangerous earth retaining walls and slopes are detected, BCA will issue Dangerous Building Orders or Closure Orders to property owners to enforce safety and rectification works.

Over the past year, BCA has served three owners with such orders for the failure of retaining walls or slopes on their properties. **P**

RALLYING FOR A BETTER BUILT ENVIRONMENT

NUS UNIVERSITY TOWN WAS BUSTLING WITH LIFE AND YOUTHFUL VIGOUR AS SOME 200 YOUTHS GATHERED FOR THE INAUGURAL BCA-NUS E! DASH 2013

Organised by BCA and the Building and Estate Management Society (BEMS) at the National University of Singapore, the BCA-NUS E! Dash is a first-of-its-kind building rally modelled after The Amazing Race. Participants were treated to an exciting and enriching learning journey as they travelled to various green pit-stops island-wide, and completed myriad fun and interactive challenges like puzzles, quizzes, and photo shoots that revolved around topics such as sustainable architecture, green building design, technology, and universal design.

The response to the inaugural race was overwhelming, with over 250 participants and 52 teams from 11 tertiary institutions, including seven teams from BCA Academy. The six pit-stops included NTUC FairPrice Finest at Zhong Shan Park (where there was a treasure hunt for green products), City Square Mall (where a photo challenge to locate universal design features within the mall took place), United Square, the venue for BCA 3rd Green Building Exhibition (where there was a quiz on green buildings and the BCA Green Mark), and NUS University Town (where teams had to construct a free-standing structure with the sustainable and recyclable materials they had collected along the way).

After racking their brains and sweating buckets for almost six hours, "10 Years Bro", a team of five 23 year-olds from NUS, NTU, and SIM, emerged as the champions of the BCA-NUS E! Dash 2013.

The first runner-up and second runner-up teams were "3G2B", a group of business undergraduates from NTU, and "THG", four best friends studying at NTU and NUS, respectively.

Overall, the inaugural race received positive feedback from event partners and participants. Mr Gabriel Soon, Technical Manager of Elmich Private Limited (Exclusive Events Partner for the BCA-NUS E! Dash), felt that the games were educational and unique compared to other races that focused more exclusively on physically demanding challenges.

Team Mortar from BCA Academy was also full of praise for the event, noting that the journeys they had taken were fun as well as educational, and gave the team members a tremendous sense of accomplishment. **P**



"The green building exhibition station at United Square was the most memorable part of the race as we had all been exposed to green building knowledge in our courses and we were given the opportunity to apply this to E! Dash."

MR CHUA ZHI HANG, TEAM LEADER OF "10 YEARS BRO"

Top | Participants came away more knowledgeable in sustainable practices both at work and at home.

Bottom | Team "10 Years Bro", champions of the BCA-NUS E! Dash 2013.



A NEW SKILLS CERTIFICATION SOURCE: OVERSEAS TEST CENTRES (OTCS) IN COLOMBO, SRI LANKA

PART OF A BCA INITIATIVE TO ENHANCE THE SUPPLY RESILIENCE OF SKILLED CONSTRUCTION WORKERS, THE FIRST OTC IN COLOMBO, SRI LANKA WILL OFFER SKILLS CERTIFICATION FROM AUGUST 2013 ONWARDS

The new OTC, setup by Fonda Global Engineering Pte Ltd, commenced operations offering six construction trades for skills certification:

1. Timber Formwork
2. Steel Reinforcement
3. Tiling
4. Plastering
5. Plumbing; and
6. Electrical Wiring Installation

The range of construction trades for skills certification will be subsequently expanded to include aluminium formwork, system formwork, door and window (timber and aluminium), precast kerb and drain laying, ducting installation for air-conditioning and ventilation as well as suspended ceiling installation (acoustical). The new Construction Safety Orientation Course Version 2.1 will also be available at the OTC by end 2013.

Another new OTC, managed by Progressive Builders Pte Ltd, is expected to be ready by October this year.

Dates of application for skills certification at the OTCs are available at https://www.bca.gov.sg/otc/otc_main.html

FOR MORE DETAILS, INTERESTED CONTRACTORS MAY CONTACT:

- BCA Skills Certification Enquiry: 6248 9845 or bca_academy@bca.gov.sg (for test application procedures)
- Fonda Global Engineering OTC (Singapore): 6275 1788 or Melvin@tree.com.sg (for fees and test details)
- Progressive OTC (Singapore): 6795 5055 or Eugena@progressive.com.sg (for fees and test details)



Top | Trainees attending practical training on system formwork at Fonda OTC.

Above | Aluminium formwork at Fonda OTC.

INNOVATING FOR GREATER SAFETY: THE 2ND INTERNATIONAL CONFERENCE ON WORKPLACE SAFETY AND HEALTH FOR THE CONSTRUCTION INDUSTRY

THE 2ND INTERNATIONAL CONFERENCE ON WORKPLACE SAFETY AND HEALTH FOR THE CONSTRUCTION INDUSTRY WAS HELD AT BCA ACADEMY ON 13 AND 14 AUGUST 2013



This second collaboration between BCA Academy and the Institute of Occupational Safety and Health (IOSH) in Singapore comes after the overwhelming response to the inaugural conference held last year.

Acting Minister for Manpower and Senior Minister of State, Ministry of National Development, Mr Tan Chuan-Jin was the Guest of Honour this year. In his opening address, Mr Tan emphasised the importance of good Workplace Safety and Health (WSH) practices in construction and how every stakeholder plays an important role in the drive for zero accidents. He also elaborated on how productive methods of construction like the use of drywall and power trowels benefit safety as well as health. Mr Tan urged all architects, designers, and clients to ensure safety from the design stage of a building's life cycle and not wait till the construction stage to implement safety at work.

The winner of this year's Design for Safety Mark (DfS Mark) competition, organised by the WSH Council, received the award from the Minister during the opening ceremony. The DfS Mark is part of an annual DfS Recognition Scheme

organised by the WSH Council in collaboration with Ministry of Manpower. It recognises projects and competent DfS teams who have adopted DfS and reduced risks through building or structure design. The Land Transport Authority clinched the title this year.

This year's conference was attended by more than 200 participants with guest speakers from the UK, Hong Kong, and Australia. Local speakers from the WSH Council, WSH Institution, NUS, and private organisations were also invited to share on topics like Design for Safety, Building Information Modelling (BIM) for Safety, and Safety Leadership in the construction industry. The conference concluded with good reviews from participants, especially regarding the innovative use of mobile technology to make learning more creative and fun on the topic of BIM for Safety. BCA Academy looks forward to continual collaboration with IOSH Singapore to organise more platforms for the discussion of workplace safety and health. **P**

Top | The conference enjoyed an excellent reception by members of the industry.

BCA RECOGNISED AT SHRI AWARDS

BCA WON THREE HR AWARDS AT THE SINGAPORE HR AWARDS 2013 HELD ON 5 JULY AT THE RITZ-CARLTON, MILLENIA SINGAPORE

The Leading CEO, Leading HR Leader and Leading HR Practices Award in Performance Management (Special Mention) were awarded by the Singapore Human Resources Institute (SHRI).


Second Minister for the Environment and Water Resources and Second Minister for Foreign Affairs Ms Grace Fu was the Guest of Honour for the annual event that recognises HR professionals and organisations that display commendable HR and people management practices.

Dr John Keung received the Leading CEO Award – an award honouring CEOs who support, champion, and endorse effective and innovative HR practices that address employee and organisational needs. Winners also demonstrate personal leadership and integrity in driving diversity and flexibility in the organisation.

BCA also won the Leading HR Practices Award in Performance Management (Special Mention). This award recognises the performance management of employees and business, and how metrics are developed and used to improve and award performance.

Last but certainly not least, Group Director of Manpower and Strategic Policy Mr Neo Choon Keong clinched the Leading HR Leader Award. This award commends outstanding leadership capabilities in overseeing, conceptualising, initiating, and implementing innovative HR practices that effectively, contribute to the success of the organisation's business strategy and goals.

Mr Neo holds an important portfolio managing the industry's local and foreign manpower policies, transforming the image of and careers in the building and construction sector as well as upgrading its workforce. He also handles organisational and human capital development at BCA, and is instrumental in BCA's pursuit of organisational excellence.

For his contributions to the nation and industry, he also received the Public Administration Medal (Bronze) Award, which recognises public officers for their outstanding efficiency and competence, in 2009. 

"The industry is a people's industry. I feel very strongly that in our small city, our built environment really has to play a big part to make sure that we are future-ready. This is probably one area where we need to do a lot more to make sure that our environment is really friendly to everybody."

DR JOHN KEUNG, CEO OF BCA



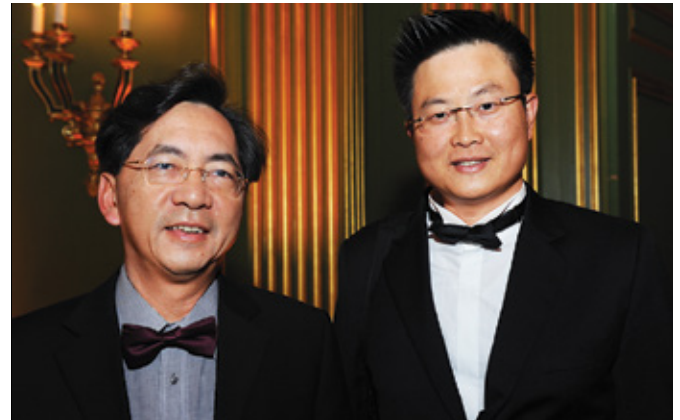
Left | Leading HR Leader Award.

Middle | Leading HR Practices Award.

Right | Leading CEO Award.

WISHING UPON AN I-STAR

BCA CLINCHES INTERNATIONAL AWARD IN RECOGNITION OF GREENING INITIATIVES



Top | Dr John Keung, CEO of BCA (left) with Mr Jeffery Neng, Director of BCA's Research Group/R&D Programmes.

Bottom | Dr Keung giving his speech upon receiving the award from U.S. Senator Mark Warner (Virginia), the Honorary Chair of the Alliance to Save Energy (ASE).

Over the years, it has been enhanced to help us achieve a national target of greening at least 80% of the buildings in Singapore by 2030.

The BCA Green Mark scheme is a key component under the BCA Green Building Masterplan. The scheme rates buildings according to their environmental performance in these areas:

1. Energy Efficiency
2. Water Conservation
3. Environmental Protection
4. Indoor Environmental Quality
5. Other Innovative Green Features

There are four score tiers: Certified, Gold, Gold^{Plus}, and Platinum.

Other accolades for BCA in developing an innovative and comprehensive approach in developing a sustainable built environment have been endorsed internationally.

- In 2010, BCA became the first government agency outside North America to be conferred the prestigious Energy and Environment Award (Government) by the Aspen Institute.
- In 2011, BCA won the inaugural World Green Building Council Regional Leadership Award.
- In 2011, BCA's green building policies were ranked No.1 in the Asia Pacific region by Solidiance and led to Singapore being ranked No.1 for environmental performance in the Asian Green City Index – ahead of cities like Tokyo, Seoul, and Sydney.

“The award is a testament to our progress in greening Singapore's built environment through BCA's Green Building Masterplan. With a robust plan that looks into all aspects of creating a sustainable built environment, I am confident that our vision of becoming a global leader in green buildings, with particular expertise in the tropics and sub-tropics, can be realised in the next few years.”

DR JOHN KEUNG, CEO OF BCA

TOWARDS A MORE ENERGY EFFICIENT FUTURE

The Masterplan has led to a significant rise in the number of green buildings, from just 17 in 2005 to more than 1,500 in 2013!

This growth is equivalent to a total floor area of approximately 44 million m² in a short span of seven years, bringing Singapore's total green building stock to 18.7%, which is estimated to have resulted in cumulative energy savings of about 3 billion kWh to date!

BCA's outstanding achievement in leading the green building movement and energy efficiency improvement being recognised by the International Star (I-Star) Award makes this win all the sweeter as it means that Singapore is the first country outside of the United States and Europe to receive this award by the Alliance to Save Energy, a US-based energy efficiency coalition. **P**



TAKING DECISIVE STEPS TOWARDS LIVING AND BUILDING GREEN

Top | Declaring the IGBC 2013 open.

Bottom | Renowned Founder and Principal of Heatherwick Studio, Mr Thomas Heatherwick, addressing his audience.

NOW IN ITS FIFTH YEAR, SINGAPORE GREEN BUILDING WEEK (SGBW), ORGANISED BY BCA, IS AN ANNUAL MEGA PLATFORM THAT BRINGS TOGETHER TWO ICONIC EVENTS — THE INTERNATIONAL GREEN BUILDING CONFERENCE (IGBC) AND THE BUILD ECO XPO (BEX) — AT A SINGLE LOCATION



“With IGBC 2013, BCA is pleased to once again bring together global green building experts, built-environment industry leaders, policymakers, and academics to exchange knowledge, share ideas, and explore opportunities to work as one to create a greener, more sustainable built environment for all.”

DR JOHN KEUNG, CEO OF BCA



Top | Delegates on the cusp of discovering green projects in Singapore during the Green Mark Tours.

Bottom | (From left) Mr Tan Tian Chong, Group Director, Technology Development Group, Building and Construction Authority, Mr Tai Lee Siang, Group Managing Director, ONG&ONG Pte Ltd and Mr Thomas Heatherwick, Founder and Principal, Heatherwick Studio.

Held at the Marina Bay Sands Expo and Convention Centre between 11 to 13 September, the world-class event attracted more than 10,000 participants from over 35 countries, many of whom were academic and industry partners, dignitaries, and innovators eager to find out the latest on green building solutions, discuss policies, and negotiate plans on sustainable developments and energy efficiency matters.

Themed “Live Green, Build Green”, SGBW 2013 featured well-respected personalities and experts who shared their thoughts and experiences with the delegates. Some of our guests included household names like Harvey Bernstein, Jane Henley, and Thomas Heatherwick.

Positioning itself as not just a static event, IGBC delegates were also taken on Green Mark tours around Singapore to visit selected locations that have distinguished themselves with an



emphasis on green and sustainable features. Some of these locations were the newly-opened retail mall JEM at Jurong East, the Treetops Executive Residences located at Orange Grove Road, and the hotel PARKROYAL on Pickering at Upper Pickering Street.

PLEDGING TO BE GREEN TENANTS

SGBW 2013 kicked off with extra emphasis on various stakeholders' engagement with sustainability. The event saw the inauguration of BCA's Green Tenant Pledge — an initiative that invites multinational and local companies to pledge their commitment in "greening" their existing or extended offices. Firms such as NTUC Fairprice and VISA Worldwide have announced their support since 13 September.

Developers like City Developments Ltd and Lend Lease also came on board in the "Green Partnership" segment to ensure the continual enhancement of the environmental performance of tenanted areas, thereby working towards the improvement of energy efficiency in buildings.

THE 3RD GREEN BUILDING MASTERPLAN

Delegates and participants had a glimpse into Singapore's built-environment future through the sneak previews of the 3rd Green Building Masterplan that were unveiled at the conference. The new masterplan outlined a vision of Singapore as a global leader in green buildings with special expertise in the tropics and sub-tropics.

Further plans in the pipeline will see BCA increasing its efforts to develop industry skills, capabilities,



Top Left | Famous local host, Diana Ser, emceeding the opening with signature poise.

Above | Panel discussions peppered throughout the event proved to be highlights as the panelists shared their valuable insights during the animated proceedings.

"Engineers have created many innovative products and services that have transformed the way we live and work. From the steam locomotives of the 18th century, to the jet planes today – shrinking distances and bringing the world closer together... Thanks to the continual innovation of engineers through the ages, our lives have become so much better today."

DPM MR TEO CHEE HEAN

and technology adoption; grooming green specialists; and working on industry standards for zero and net-positive energy buildings and low energy high rise buildings. The new masterplan will also include carbon emission reduction strategies, and to look to improve the quality of the built environment as well as occupant well-being.

BRINGING THE WORLD'S ENGINEERS TOGETHER

One of the most exciting additions to SGBW was the inaugural World Engineers' Summit (WES) 2013.

The opening was officiated by Guest of Honour, DPM Teo Chee Hean. The summit focused on the role engineers play in solving climate change challenges as well as the importance of engineering in developing solutions to many common problems, thus framing it as a course of study that leads to a vibrant career path.

WES 2013 saw leading thinkers and advocates of sustainability from all public and government sectors coming together to discuss issues concerning environmental policies, food and water security, and natural disaster management, among others.

A key highlight of WES 2013 was the Young Engineers Competition. It affirmed the call to engage our youths to take up engineering as a profession. Themed "Trust Us, We're Engineers", the competition sought innovative answers to chief environmental issues from students the world over. The best ideas for sustainable solutions that addressed the impacts of climate change won prizes of up to S\$8,000. **P**

CONTINUAL EDUCATION AND TRAINING FOR RENEWAL OF CORETRADE AND MULTI-SKILLING REGISTRATION


TO REMAIN AHEAD, WE MUST CONTINUE LEARNING



Top | Classroom-style CET course.

With the national productivity drive initiative at full throttle, BCA and the industry will now strive to ensure that CoreTrade personnel and Multi-Skilled workers continually upgrade their trade skills and knowledge.

Starting from 1 October 2013, CoreTrade personnel and Multi-Skilled workers will need to attend Continual Education and Training (CET) to renew their registration status. The CET will be a half-day course covering the latest codes and regulations, good practices, and new methods, materials, tools, and equipment relevant to specific construction trades or areas of responsibility for registered personnel.

BCA has appointed 14 Approved Training and Testing Centres (ATTCs) to conduct the CET courses. 

CORETRADE CET COURSES

TRADES	ATTCs OFFERING
Air-Conditioning Ducting Installation	Jackly Engineering Pte Ltd
Cladding and Curtain Wall Installation	Positive Engineering Pte Ltd
Construction Plant Operation (Non-Lifting)	Fonda Global Engineering Pte Ltd
	P-One (S) Pte Ltd
	Yun Onn Co. (Pte) Ltd
Door and Window Installation	Fonda Global Engineering Pte Ltd
Drywall Installation	
Electrical Works	Fonda Global Engineering Pte Ltd
	Santarli Construction Pte Ltd
Fire Protection Works	Deluge Fire Protection (S.E.A.) Pte Ltd
Gas Pipefitting Works	OSK Engineering Pte Ltd
Glazing Works	Singapore Glass Association
Joinery Works	Fonda Global Engineering Pte Ltd
	P-One (S) Pte Ltd
Lift Installation	Fonda Global Engineering Pte Ltd

TRADES	ATTCs OFFERING
Plumbing and Piping Works	Fonda Global Engineering Pte Ltd
	Santarli Construction Pte Ltd
	Solely Construction Pte Ltd
Reinforced Concrete Works	Fonda Global Engineering Pte Ltd
	Santarli Construction Pte Ltd
	Solely Construction Pte Ltd
	Tiong Seng Contractors Pte Ltd
Structural Steel Works	Setsco Services Pte Ltd
	Shingda Construction Pte Ltd
	Wing Tuck Engineering Pte Ltd
Suspended Ceiling Installation	Fonda Global Engineering Pte Ltd
Tiling, Stone Laying, and Floor Finishing Works	Fonda Global Engineering Pte Ltd
	Santarli Construction Pte Ltd
	Solely Construction Pte Ltd
Waterproofing Works	Fonda Global Engineering Pte Ltd
	Santarli Construction Pte Ltd
	Solely Construction Pte Ltd

ATTCs contact details can be found at <https://www.bca.gov.sg/CoreTrade/others/ATTCcontacts.pdf> or by scanning the QR code.



EVENT LINE UP

Workshop for Company
CEO/Top Management
(bizSAFE Level 1)
(24th Run)
10 DEC 2013

Site Investigation for
Engineers (17th Run)
10, 12, 17 & 19 DEC 2013

Good Industry Practices –
Waterproofing for
External Wall
7 JAN 2014

BCA-REDAS Built Environment
and Property Prospects
Seminar 2014
9 JAN 2014

Energy Efficiency & Drives
(5th Run)
9 & 10 JAN 2014

Good Industry Practices –
Marble Granite
Ceramic Tiling
14 JAN 2014

Essential Knowledge in
Construction Regulations &
Management for Licensed
Builders (English)
(26th Run)
20–22 JAN 2014



IMAGE: ISTOCK/THINKSTOCK

Good Industry Practices –
Timber Flooring
21 JAN 2014

Certified QM/CONQUAS
Manager Course (31st Run)
22–24 JAN 2014

Workshop on Preparing &
Defending Loss & Expense
Claims (14th Run)
22 JAN 2014

Bachelor of Construction
Management (Building)
(awarded by The University
of Newcastle, Australia)
(Full-Time/Part-Time mode
will be available)
STARTING IN FEB 2014

CONTACT:
**BCA ACADEMY – MARKETING &
BUSINESS DEVELOPMENT UNIT**
DID: 6248 9843/824
EMAIL: bca_academy@bca.gov.sg



IMAGE: ISTOCK/THINKSTOCK



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