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INTERNATIONAL GREEN
BUILDING CONFERENCE 2011

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ISSUE 05 • OCT-NOV 2011 • CONTENTS

pg 01 CEO'S MESSAGE



ROUNDUP

- 11 BCA ACADEMY GRADUATION DAY 2011
- 13 BUILT ENVIRONMENT PAVILION AT THE NTU INTERNSHIP FAIR 2011
- 13 NUS CEE TEAM WINS BIG AT APEC-IDEERS COMPETITION

TALKING POINTS

- 14 TSINGHUA-BCA ADVANCED MANAGEMENT PROGRAMME
- 15 EXECUTIVE DEVELOPMENT PROGRAMME FOR CAMBODIAN MINISTRY

16 MISSION TRIP TO ZHAOQING MUNICIPAL CITY

16 BCA-REDAS QUALITY & PRODUCTIVITY SEMINAR 2011

FEATURES

17 BCA EXTENDS ITS GREEN MARK CERTIFICATION TO RESTAURANTS

18 BCA GREEN BUILDING EXHIBITION

TAKE NOTE

20 CALL FOR NOMINATIONS

HAPPENINGS

21 EVENT LINE UP

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Pillars is published bi-monthly by the Communications Department Building and Construction Authority 5 Maxwell Road #16-00 Tower Block MND Complex Singapore 069110
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RIDING THE GREEN WAVE


Dear Readers,

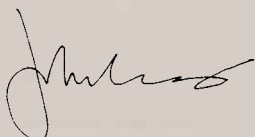
2011 has been a momentous year for us at BCA. Just a few months ago, we organised the 2nd International Green Building Conference (IGBC), which was held from 13–16 September 2011 during the Singapore Green Building Week. The conference brought together some of the world's leading experts to address challenges and explore innovative, actionable solutions in green building development for the tropics and sub-tropics. A big thank you to everyone for your strong support in making IGBC 2011 yet another success. I strongly urge industry practitioners to continue to ride the green wave, and to "Build Green. Act Now."

On the same note, I would like to commend eight leading developers and building owners who have signed the Green Pledge to show their commitment to attain higher energy efficiency for all their existing buildings through the BCA Green Mark certification by 2020. I hope that this, as well as the results of our recent study with NUS, on how greening existing buildings can increase property value, will encourage more industry players to join in Singapore's green building movement.

I am proud to share that BCA will be working with United Nations Environment Programme (UNEP) to establish a collaborating centre, the first in Asia and one of the few collaborating centres with UNEP, to drive sustainable building in Southeast Asia. We will also be sharing Singapore's expertise in sustainable master planning, green building designs, technologies and materials with Zhaoqing Municipality, under a collaborative framework with the local government.

A number of new initiatives have been launched in the previous months. This included the pilot Building Retrofit Energy Efficiency Financing (BREEF) scheme to provide loans to building owners and energy services companies to carry out energy retrofits, as well as funding for the new Diploma Scholarship and Sponsorship Programmes through the \$250 million Construction Productivity and Capability Fund (CPCF). We hope that the two new education funding programmes will help attract more talented young individuals to take up built environment courses at our local tertiary institutions.

Lastly, I would like to wish everyone a happy new year in advance, and hope that the new year will bring along abundant opportunities for our construction industry. Let us continue to work hand in hand towards shaping a safe, high quality, sustainable and friendly built environment. 



Dr John Keung
Chief Executive Officer



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International
Green Building
Conference 2011
Singapore

INNOVATIVE, SUSTAINABLE AND ACTIONABLE GREEN BUILDING SOLUTIONS FOR THE TROPICS AND SUB-TROPICS WERE EXPLORED AT THE INTERNATIONAL GREEN BUILDING CONFERENCE 2011.

BCA CALLS ON INDUSTRY STAKEHOLDERS TO “BUILD GREEN. ACT NOW.”

BCA’s second International Green Building Conference (IGBC) took place from 13–16 September during the Singapore Green Building Week (SGBW). This year saw the participation of close to 1,000 delegates from over 32 countries, including acclaimed industry experts such as Ms Jane Henley, CEO, World Green Building Council and Dr Arab Hoballah, Chief of UNEP’s Sustainable Consumption and Production Branch.

This year’s IGBC was a unique 7-in-1 event with symposiums by local and international partners such as the United Nations Environment Programme, World Green Building Council, China Green Building Council, Singapore Green Building Council, American Society for Civil Engineers and the Waste Management and Recycling Association of Singapore.



Top | Close to 1,000 delegates from over 32 countries attended IGBC 2011.

Themed “Build Green. Act Now.”, the four-day conference aimed to drive action for real world, tangible green building solutions, with industry leaders and policy makers addressing challenges and exploring sustainable building solutions for the tropics and sub-tropics.

Highlights of the conference included the launch of a new pilot scheme – the Building Retrofit Energy Efficiency Financing (BREEF), which will provide loans to building owners and energy services companies to carry out energy retrofits, as well as the introduction of legislation to extend minimum Green Mark standards to existing buildings, making Singapore one of the first few countries in the world to mandate such standards. These were announced by Minister of State for National Development and Manpower, BG (NS) Tan Chuan-Jin, who opened the IGBC and the Build Eco Xpo (BEX) Asia 2011 exhibition, held alongside IGBC. Minister Tan also witnessed the signing of two Memoranda of Understanding, one with Zhaoqing Municipal People’s Government and the other with United Nations Environment Programme (UNEP).

Other key events that happened during SGBW included the inaugural IGBC 2011 Tropical Architecture Design Competition and BCA Green Mark Tours.

In addition, the 2nd Asia-Pacific Economic Cooperation (APEC) and Association of Southeast Asian Nations (ASEAN) Green Building Workshop was held for the first time in Singapore. The event, held at the BCA Academy, was supported by the US Department of Commerce and brought together 175 senior officials and green building experts from APEC’s 21 Economies to discuss green issues, negotiate solutions to trade barriers on green products and services, and examine green building standards within the APEC economies.

“From WGBC’s perspective, what is most important is IGBC being able to motivate regional collaboration, which happens when governments and industry come together and see what the other is doing. For governments like the Indonesian and the Vietnamese governments, and those attending IGBC, what’s great is that they are now looking at what they should be doing and understanding the opportunity with green buildings, what is possible, that it makes economic sense, and that business is backing it.”

JANE HENLEY, CEO OF THE WORLD GREEN BUILDING COUNCIL (WGBC)

“The intention behind organising IGBC was to enable industry practitioners to take action, not just sometime in the future, but now. To achieve this goal, the conference brought together some of the world’s leading experts in this field who shared their thinking, approaches and tangible, proven, yet innovative green building solutions including real-world examples right here in Singapore.”

DR JOHN KEUNG, CEO OF BCA



BEX Asia 2011 returns for the 4th consecutive year with a stronger focus on green building architecture, design, products, practices and technologies for environmental sustainability. BCA’s Green Pavilion at BEX Asia this year focused on the greening of existing buildings. There was also an interactive platform for visitors to try greening a virtual building.



Top | BCA Green Pavilion at BEX Asia.

Above | Officials and green building experts from APEC’s 21 Economies gathered at the APEC and ASEAN Green Building Workshop.



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UNEP-BCA COLLABORATING CENTRE

BCA and the United Nations Environment Programme (UNEP) have elevated collaboration in the fight against climate change. The two organisations finalised an agreement establishing BCA's Centre for Sustainable Buildings as a "Centre Collaborating with UNEP", with the signing of a Memorandum of Understanding on 14 September, at the International Green Building Conference 2011. It formalises the cooperation between BCA and UNEP to provide policy advice and outreach activities related to sustainable resource management in the building sector, to reduce carbon emission.

The collaboration between the BCA and UNEP marks recognition of the role that the building and construction sector will play in mitigating climate change, and its contribution to the creation of new, green jobs that will be pivotal in the switch to a Green Economy. "A transition to a Green Economy will partly depend on sectors like building and construction investing in innovation that catalyses low carbon technologies and practices, as well as contributing to more sustainable working," said Dr Achim Steiner, UNEP's Executive Director and United Nations Under-Secretary-General. "I congratulate the Building and Construction Authority of Singapore on its foresight in taking a leading role, and UNEP looks forward to working together."

"We are very pleased to formally establish BCA Centre for Sustainable Buildings as a centre collaborating with UNEP. Access to BCA's expertise and regional network will broaden our collective ability to not only widen adoption of sustainable building policies in the region through outreach and awareness, but will also expand the research and analysis needed to establish baselines, facilitate best practices and look more specifically at the unique aspects of sustainable building in tropical countries."

DR ARAB HOBALLAH, CHIEF OF UNEP'S SUSTAINABLE CONSUMPTION AND PRODUCTION BRANCH



Above | 2nd UNEP SBCI-BCA Regional Workshop on Sustainable Building Policies in South-East Asia.

Right | Mr Quek See Tiat, BG (NS) Tan Chuan-Jin, Dr Arab Hoballah and Dr John Keung, at the UNEP-BCA MOU signing ceremony.

Dr John Keung, BCA Chief Executive Officer said that the new collaborating centre in Singapore, which is the first in Asia and one of the few collaborating centres with UNEP, is an endorsement of Singapore's concerted efforts in driving sustainability in the built environment and in building capabilities, regionally and internationally. "We will strive to grow the BCA Centre for Sustainable Buildings into a hub for green buildings in the region and contribute to the global efforts of reducing carbon emissions from buildings," he added.

BCA joined the UNEP Sustainable Buildings and Climate Initiative (UNEP-SBCI) in 2009, and has since become an important advocate of sustainable buildings in Southeast Asia. For instance, BCA participates in the Common Carbon Metric (CCM) Pilot, one of the key projects undertaken by UNEP-SBCI, to develop policy strategies and tools to measure energy consumption and report greenhouse gas (GHG) emissions from building operations. BCA also currently produces a series of "State of Play" reports for eight Southeast Asian countries to contribute to UNEP-SBCI's growing publications in assessing policies and practices in sustainable building, thus broadening the reach and distribution of UNEP's work on sustainable buildings and cities.





Left | IGBC 2011 delegates toured McDonald's restaurant at Jurong Central Park, the first restaurant to receive the BCA Green Mark Platinum rating.



Left | Participants were also given a tour around the Ogilvy & Mather office, a recipient of the BCA Green Mark Gold^{Plus} Award.



Right | Solaris, a 15 storey multi-tenanted facility for infocomms, media, science, engineering research and clean-tech development at One-North is winner of the BCA Green Mark Platinum award, SIA-NParks Skyrise Greenery Award 2009 and the Green Good Design Awards, 2010.



BCA GREEN MARK TOURS

One of the key highlights of the International Green Building Conference (IGBC), the BCA Green Mark Tours, continues to be well-received by conference participants.

As part of IGBC 2011, conference delegates were given the option to tour exemplary building projects in Singapore, which have been accorded the BCA Green Mark Gold^{Plus} or Platinum Award for outstanding tropical green building design and solutions.

The tours, which took place on 13 September 2011, covered a wide range of projects including commercial, residential, hospital, office and infrastructure projects.

BCA GREEN MARK TOUR SITES INCLUDE:

- Asia Square
- City Square Mall
- Treelodge@Punggol
- Kaer Office
- Mapletree Investment Office
- Marina Barrage
- McDonald's@Jurong
- Ogilvy & Mather Office
- Solaris
- Tokio Marine Centre
- Unilever Asia Office
- Zero Energy Building@BCA Academy



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RAISING ENVIRONMENTAL SUSTAINABILITY STANDARDS

One of the targets under the Sustainable Development Blueprint was to have at least 80% of buildings in Singapore attain minimum Green Mark standards by 2030. To kick-start the stride to achieve a greener and more sustainable Singapore, BCA implemented the Building Control (Environmental Sustainability) Regulations in 2008 that stipulates a minimum Green Mark score for new buildings. BCA further set up a \$100 million incentive scheme in 2009 to promote and drive the retrofitting of existing buildings to be more energy efficient.

To date, there are more than 90% of existing buildings built before the 2008 Regulations. This existing building stock is an area that BCA would have to reach out to, to achieve the goal set under the Sustainable Development Blueprint.

PILOT BUILDING RETROFIT ENERGY EFFICIENCY FINANCING SCHEME

During the International Green Building Conference 2011 in September, Minister of State for National Development and Manpower, BG (NS) Tan Chuan-Jin announced a new pilot scheme called the Building Retrofit Energy Efficiency Financing (BREEF) Scheme, which will provide loans to building owners and energy services companies to enable them to carry out energy retrofits from 1 October this year. BCA and participating financial institutions – Standard Chartered Bank and United Overseas Bank – will commit to sharing the risk of any loan default.

For more information on the BREEF scheme, please log on to www.bca.gov.sg/GreenMark/breef.html

REGULATORY MEASURES TO RAISE ENVIRONMENTAL SUSTAINABILITY STANDARDS FOR EXISTING BUILDINGS

In October 2011, BCA published a paper on a proposed three-pronged legislation to consult the various industry partners. The proposal includes the following mandatory requirements:

- (a) The submission of annual electricity consumption data of buildings (excluding industrial buildings and dwelling units). Besides forming the basis for our national benchmark, the data will also be made known to the building owners allowing them to be aware of the energy consumption of their own buildings in comparison to the consumption norm of buildings in the same category.



(b) Achieving at least a certified level of the BCA Green Mark when the building owners install/replace their central building cooling systems for their existing buildings. As the installation/replacement of central cooling systems is extensive work, it is opportune for the building owners to look into upgrading other services and equipment in the buildings to achieve good overall energy performance for their buildings. For a start, office, hotel and retail buildings will need to comply with this requirement.

(c) Building owners are to conduct three-yearly audits on the operational efficiency of their building cooling systems to ensure that buildings continue to operate efficiently, after being retrofitted for better energy efficiency.

The consultation period for the proposal ended in November. BCA is now analysing the feedback provided and will fine-tune the legislative proposal where necessary.

Left | BG (NS) Tan Chuan-Jin, Minister of State for National Development and Manpower announced the Building Retrofit Energy Efficiency Financing (BREEF) Scheme at the opening of IGBC 2011.



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INTERNATIONAL TROPICAL ARCHITECTURE DESIGN COMPETITION

A first-of-its-kind design competition that focuses on tropical architecture and building design solutions was held during the Singapore Green Building Week 2011. The inaugural International Tropical Architecture Design Competition is an initiative by BCA, the Singapore Institute of Architects (SIA) and the Singapore Green Building Council (SGBC), with sponsorship by ADDP Architects LLP. It aims to nurture future architects and experts in tropical green building designs and ultimately develop Singapore as the talent hub for tropical green architecture.

The competition was open to architecture students from Institutes of Higher Learning (IHLs) in Asia-Pacific. Entries could be submitted

via teams or individuals, all of whom must be enrolled in an architecture or building design undergraduate or post-graduate programme. Entries could comprise an entire building, a detailed study, a building element or even a macro scale intervention, as long as they are related to the tropical climatic context, the local vernacular of the site and the site landscape.

A total of 59 entries from China, Hong Kong, India, Indonesia, Malaysia, Pakistan and Singapore were received and judged on various criteria such as design concept and creativity, relevance to tropical context/theme, as well as balance of innovation and feasibility. Bonus points were given to projects that met the recognised green building rating systems.

Judges of the competition included Mr Lam Siew Wah, Deputy CEO, Industry Development (DCID) of BCA, Mr Ashvinkumar Kantilal, President SIA, Mr Tai Lee Siang, President SGBC, Mr Tang Kok Thye from ADDP and Ms Rita Soh, President Board of Architects.

Mr Ashvinkumar Kantilal of SIA, said, "This is an excellent effort to generate awareness and consciousness of the principles of integrating environmentally sustainable practices at the learning stage, as this would imbue a sense of responsibility and a correct mindset which they will bring with them when they start their career journey."

“ BCA feels it is our privilege to provide opportunities for the future generation of green architects and construction industry professionals to showcase their talents and ideas to the world. The entries we received feature some very innovative designs from students across the region, and I am pleased with the positive response the competition has received. ”

MR LAM SIEW WAH, DEPUTY CEO, INDUSTRY DEVELOPMENT (DCID) OF BCA



Opposite Page | Mr Adrian Lo Yee Cheung, winner of the inaugural International Tropical Architecture Design Competition for Institutes of Higher Learning receiving the award from Guest-of-Honour, Mr Lee Chuan Seng, Deputy Chairman, BCA, at the IGBC Networking Reception.

Right | The top five selected entries of the inaugural International Tropical Architecture Design Competition for Institutes of Higher Learning were displayed at the Suntec Convention Centre during IGBC 2011.

Below | Other winners of the inaugural International Tropical Architecture Design Competition.



THE RESULTS OF THE COMPETITION ARE AS FOLLOWS:

- 1st Prize (\$3,000)
– Adrian Lo Yee Cheung (The University of Hong Kong)
- 2nd Prize (\$2,000)
– Baskar Nittin Vignesh, Vignesh Srinivas Kaushik, Venkatesan Jayaraman, Rupesh Iyengar and Ermanno Cirillo (National University of Singapore)
- 3rd Prize (\$1,000)
– Leong Kim Ling (Universiti Kebangsaan Malaysia)
- Merit Prize (\$500 each)
– Li Wei Xin (Chu Hai College of Higher Education) and Mabin (Kerala University)

Winners received their prizes from the Guest-of-Honour, Mr Lee Chuan Seng, Deputy Chairman, BCA, at the IGBC Networking Reception on 14 September 2011.

Mr Tai Lee Siang of SGBC also added that “SGBC is proud to partner BCA and SIA to promote environmentally sustainable architecture of the tropics. Through this, we are hopeful that we will see not only good participation but also brilliant solutions that can be turned into reality in our battle against climate change”.

Five finalists – two from Hong Kong and one each from India, Malaysia and Singapore – were shortlisted. The final round of selection took place during the Singapore Green Building Week, with Adrian Lo Yee Cheung, a 26-year-old architecture student from The University of Hong Kong, declared as the winner of the inaugural International Tropical Architecture Design Competition for Institutes of Higher Learning.



THE BCA BREAKFAST TALK FOR CEOs,
ONE OF THE HIGHLIGHTS OF IGBC 2011

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BCA BREAKFAST TALK FOR CEOs

One of the highlights of the International Green Building Conference (IGBC) 2011 was the BCA Breakfast Talk for CEOs, where more than 180 invited guests, comprising CEOs, senior management in the industry, property valuers, foreign delegates and media discussed actions that will help enhance the value and sustainability of buildings.

The Talk included a panel discussion moderated by Ms Jessica Cheam, Correspondent at The Straits Times and a panel which comprised notable industry leaders such as Mr Rod Leaver, CEO Asia, Lend Lease, Mr Tan Tian Chong, BCA's Director for Technology Development and representatives from two leading estate valuation firms. The panelists shared their thoughts and insights on green buildings valuation.

Prof Yu Shi Ming from Department of Real Estate, National University of Singapore (NUS) presented on the enhanced valuation and business case of retrofitting an existing inefficient building to meet high energy efficiency standards under the BCA Green Mark scheme.

Results of the study showed that greening existing buildings can increase property value. Commercial building retrofits can lead to average expected savings in operating expenses by 10% and an increase in the building's capital value by about 2%. Retrofitting to achieve the BCA Green Mark certification can also result in a significant reduction in energy consumption, and this can usually be done with minimal disruption to both building owners and users. To present a stronger business case for greening existing buildings, BCA and NUS will work with the Singapore Institute of Surveyor and Valuers (SISV) on green building valuation guidelines. **P**



During the session, eight leading developers and building owners, Allgreen Properties Ltd, Ascendas Land (Singapore) Pte Ltd, CapitaLand Limited, City Developments Ltd, Frasers Centrepoint Limited, Furama Hotels International, Keppel Land Limited and Lend Lease also signed a Green Pledge to show their commitment to attain higher energy efficiency of their existing buildings through the BCA Green Mark certification by 2020.

Top | Speakers at the BCA CEO Breakfast Talk discuss actions that will help enhance the value and sustainability of buildings.

BCA ACADEMY GRADUATION DAY 2011

ENSURING THE FUTURE TALENT OF SINGAPORE'S GREEN BUILT ENVIRONMENT.



Top | Guest-of-Honour, BG (NS) Tan Chuan-Jin, Minister of State for National Development and Manpower, addressing the graduating cohort and invitees at the Graduation Ceremony.

The BCA Academy (BCAA) Graduation Day, held on 28 October 2011 at the BCAA Function Hall, saw 470 diploma graduating students receive their hard-earned qualifications from BG (NS) Tan Chuan-Jin, Minister of State for National Development and Manpower, who was the Guest-of-Honour for the ceremony.

In his address, Minister Tan advised graduating students to expose themselves to the experience available in the construction industry and see how boundaries can be pushed. He encouraged them “to tap on those who have gone before you and who have many practical experiences”.

Minister Tan also unveiled two of BCA's new manpower development programmes – the Diploma Scholarship and Diploma Sponsorship. A partnership between BCA and the industry, the programmes seek to attract talents to pursue built environment courses at the local Polytechnics and BCAA, and subsequently join the industry and lead the construction workforce at the technical and supervisory level. This is in line with BCA's vision to develop a building and construction sector that is technologically advanced, led by progressive firms, and supported by a competent and highly skilled workforce. >

“By mapping out a clear career progression path for the students, the programmes give an extra nudge for students to seriously consider pursuing a career in the built environment. These manpower development programmes will also certainly benefit progressive firms that take a long-term view on the value of a quality and competent workforce, which is the cornerstone of a technologically advanced sector.”

ER HO SIONG HIN, PRESIDENT OF THE INSTITUTION OF ENGINEERS SINGAPORE



Above | All smiles – Some of the 470 graduates after receiving their certificates.

Below Right | Minister Tan presenting an academic excellence award to BCA Academy's valedictorian, Li Chen.

NEW BCA-INDUSTRY BUILT ENVIRONMENT DIPLOMA SCHOLARSHIP & SPONSORSHIP PROGRAMMES

Open to locals as well as commendable foreign students, the new programmes comprise two phases:

DIPLOMA STUDY PHASE: The Diploma Scholarship covers the scholar's full tuition fees and offers a monthly allowance of \$900. In total, local diploma students could receive up to \$15,000 per year during their study. Participating firms will co-fund only \$4,000 per student per year, with the remaining amount supported by the government. The Diploma Sponsorship aims to reach out to a larger group of potential entrants, and will provide \$7,000 per year for each sponsored student. Here, sponsoring firms will co-fund up to \$5,000 per student per year.

POST-DIPLOMA DEVELOPMENT PHASE:

The graduate will be bonded with his/her sponsoring firm. For both the Diploma Scholarship and Sponsorship programmes, BCA will work with sponsoring firms to provide the diploma graduates with a structured on-the-job training programme and an upgrading opportunity through part-time specialist or

advanced diploma programmes, to deepen their knowledge in specific areas. To further boost the appeal of built environment careers, BCA will work with the sponsoring firms to provide attractive remuneration package for local diploma graduates.

FULL SUITE OF MANPOWER DEVELOPMENT PROGRAMMES TO ENHANCE THE QUALITY OF THE CONSTRUCTION WORKFORCE

With the new programmes in place, BCA now has a full suite of manpower development incentive schemes for firms in the building and construction sector to tap on, covering the professional, technical, supervisory, foremen and tradesmen levels:

- The existing joint BCA-Industry Built Environment Undergraduate Scholarship
- The new BCA-Industry Built Environment Diploma Scholarship and Diploma Sponsorship
- The recently announced Built Environment Apprenticeship

With these programmes, BCA will partner industry firms to build up a competent and productive workforce at all levels to anchor and lead the transformation of the building and construction sector. **P**



▶ For more information, please log on to www.buildingcareers.sg.



Left | Students and human resource representatives interact to assess if suitable matches can be made, during the recent NTU Internship Fair.

BUILT ENVIRONMENT PAVILION AT THE NTU INTERNSHIP FAIR 2011

The Building and Construction Authority joined hands with the industry in a concerted effort to promote built environment careers at the Nanyang Technological University's Internship Fair in August this year.

Partnering a total of 20 industry firms, including developers, consultant firms, contractors, and statutory boards from the building and construction industry, BCA presented the unique "Built Environment Pavilion" at the Nanyang Auditorium where the internship fair was held.

It was a fruitful experience for both the students and participating firms, with an impressive turnout of more than 5,000 students. **P**

Below | NTU students showed keen interest in the BCA-Industry Built Environment Scholarship.



NUS CEE TEAM WINS BIG AT APEC-IDEERS COMPETITION

Despite facing stiff challenges at this year's Asia Pacific Economic Cooperation – Introducing and Demonstrating Earthquake Engineering in Schools (APEC-IDEERS) competition, the National University of Singapore's Civil & Environmental Engineering (NUS CEE) team swept all three major awards in the undergraduate category, under the mentorship of Dr Pang Sze Dai. The competition was held from 21 to 25 September 2011 and attracted a total of 99 teams from universities of various countries including Singapore, Japan, Hong Kong and India.

The NUS CEE team included Tan Li Hong and Tah Kok Hong, BCA-Keppel Land and BCA-SSSS (Singapore Structural Steel Society) scholars respectively, as well as Tan Kian Keng and Caroline Ong. The team was awarded the first prize and won in the "Most Creative Structural Design" and "Most Creative Architectural Design" categories. **P**

Below | (from left) Ong Shu Xian Caroline, Tan Kian Keng, Mentor Dr Pang Sze Dai, Tan Li Hong, Tah Kok Hong.





TSINGHUA-BCA ADVANCED MANAGEMENT PROGRAMME

VENTURING INTO THE 2ND TIER CITIES OF CHINA THROUGH THE TSINGHUA-BCA ADVANCED MANAGEMENT PROGRAMME.

Launched in 2002, the Tsinghua-BCA Advanced Management Programme presents a unique learning and networking opportunity for industry participants.

12 participants from the building industry including representatives from financial institutions attended the 10th Tsinghua-BCA Advanced Management Programme from 10–15 October 2011. Jointly organised by BCA and Tsinghua University, Wuhan was chosen as the second city for the Programme. The programme was previously conducted in Beijing.

Like other second-tier cities in China, Wuhan faces constraints in infrastructure. However, its growing infrastructure and policy support offer tremendous investment opportunities in the real estate and construction sector, particularly when markets in first-tier cities like Beijing and Shanghai have recently grown and long-term measures have been taken by the government this year to curb speculations and keep the housing market affordable through various policies.

Since its inception in 2002, the Advanced Management Programme provides an excellent platform for influential decision makers from Singapore to engage in forums with experts in China on the challenges and opportunities presented by the social, economic, financial and legal frameworks in China's real estate and the construction industry. Conducted yearly, the next intake of the Programme is expected in October 2012.

Lectures in the Tsinghua-BCA Advanced Management Programme were conducted by top academics, industry experts, and selected government officials of relevant State Departments. This year, a visit to CB Richard Ellis' Wuhan Office was also arranged to brief the participants on latest industry developments in Central China. **P**



Top | Tsinghua-BCA Advanced Management Programme's participants at the historical gate of Tsinghua University.

Above | Tsinghua-BCA Advanced Management Programme's participants at the graduation ceremony.

Below | Wuhan University of Technology.



EXECUTIVE DEVELOPMENT PROGRAMME FOR CAMBODIAN MINISTRY

TRAINING DEVELOPMENT PROGRAMME FOR THE CAMBODIAN MINISTRY OF LAND MANAGEMENT, URBAN PLANNING AND CONSTRUCTION.

BCA and Temasek Foundation launched a customised executive development programme to train 1,140 Cambodian government officials in land management, urban planning and building control. Initiated by International Enterprise (IE) Singapore, this training programme was conducted in Phnom Penh by a team of senior officials and experts from the BCA, Urban Redevelopment Authority (URA) and Singapore Land Authority (SLA).

The first batch of 140 officials from the Ministry of Land Management, Urban Planning and Construction of Cambodia (MLMUPC) successfully completed the programme on 9 September 2011. A certificate

presentation ceremony was organised in Phnom Penh and attended by the Guest-of-Honour, His Excellency S Premjith, Singapore Ambassador to Cambodia.

Following the programme, the participants will share what they have learnt with another 1,000 officials across the 24 provinces and municipalities in Cambodia. In addition, the participants will use what they have learnt to identify new initiatives, policies, reforms and processes that will contribute to Cambodia's National Urban Development Strategy and Construction Policy and Law Formulation Initiative. **P**

THROUGH THE PROGRAMME, THE CAMBODIAN OFFICIALS LEARNED ABOUT:

- (a) Singapore's strategies in national development in land management, urban planning and building control
- (b) The policies and regulations that were developed for these strategies
- (c) The resources and expertise needed to administer these policies and regulations and
- (d) Singapore's building codes and regulations, including the issuance of construction permits.

"The programme is unique and significant as it provides insights into Singapore's urban development journey underpinned by our key principles in urban governance. Through the joint efforts of several Singapore agencies, including BCA, URA and SLA, this programme will share how Singapore has evolved to her current state of infrastructure development through careful and systematic planning, as well as a robust regulatory framework."

DR JOHN KEUNG, CEO OF BCA

"I am heartened to note the strong participation in this programme where the attendance included senior leaders at the levels of the Secretary of State and the Under Secretary of State. This reflects the Ministry's determination to strengthen its efforts in developing and implementing a national blueprint for infrastructure development. This training is a good start and sets the base for future collaboration between both countries... Together, we can transform Asia and its place in the world so that we can continue to attract good quality foreign capital."

MR S PREMJIITH,
SINGAPORE AMBASSADOR TO CAMBODIA



"Cambodia's population growth has continued to increase steadily, which can be a source of pressure on the demand of land use, both for housing as well as economic and urban development. With proper land management or land use planning, we can better manage the country's resources in a proper, highly effective and sustainable manner."

MR IM CHHUN LIM, SENIOR MINISTER OF MLMUPC

MISSION TRIP TO ZHAOQING MUNICIPAL CITY

Following the signing of a Memorandum of Understanding between BCA and the Zhaoqing Municipal People’s Government on 14 September 2011, BCA led 21 Singapore delegates comprising planners, architects and investors on a mission trip to the Zhaoqing Municipality in China in October.

The objective was to introduce Singapore firms to the Zhaoqing Municipal People’s Government, as well as to seek business opportunities in the “Zhaoqing Green Low-Carbon City” project.

Our firms participated in the “Eco Low-carbon City Planning and Development Forum” where they shared and showcased their capabilities and experience in sustainable master planning and green building designs. The delegates also visited several proposed development sites to get first-hand information about the physical environment.

The delegates were apprised of future development plans by the Zhaoqing government officers who were impressed by Singapore’s competencies in sustainable development. **P**



Above | BCA officers meeting with leaders of the Zhaoqing Municipal People’s Government.

BCA-REDAS QUALITY & PRODUCTIVITY SEMINAR 2011

The BCA-REDAS Quality Seminar is an annual event co-organised by BCA and the Real Estate Developers’ Association of Singapore (REDAS). It serves to raise awareness of construction quality and productivity among builders, developers and construction professionals. This year’s seminar was held on 18 October at the BCA Academy, and well attended by more than 200 participants.

The seminar shared best practices on products and systems that can improve productivity and yet ensure high quality construction. For example, adopting system formwork and precast walls can help projects attain cost savings and superior CONQUAS and Quality Mark scores.

Six papers were presented by speakers from a developer and contractors with extensive experience in private and public sector projects. To wrap up the seminar, BCA presented its findings on a benchmarking study on building quality in Tokyo, Japan and Paris, which showed Singapore’s high-end residential buildings’ workmanship quality is marginally below Tokyo’s but significantly ahead of Paris’. **P**



Above | Part of more than 200 participants in rapt attention.



Left | (From left to right) The organisers and speakers who made it happen: Dr Steven Choo, Mr Lim Song King, Mr Adrian Fong Ying Sin, Mr Srikanth Parthasarathy, Mr Tan Tian Chong, Mr Lim Han Kwong, Mr Wong Cheng Huat, Mr Goh Thiam Lai.



BCA EXTENDS ITS GREEN MARK CERTIFICATION TO RESTAURANTS

BCA GREEN MARK – ONE OF THE WORLD'S FIRST GREEN BUILDING RATING SYSTEM TO BE DEVELOPED FOR THE TROPICAL ENVIRONMENT, HAS NOW EXPANDED TO INCLUDE RESTAURANTS.

The BCA Green Mark has expanded to include another category – restaurants. In the latest initiative to raise greater awareness of the importance of users' sustainability thinking and behaviour within buildings, BCA awarded five restaurants the BCA Green Mark.

A new addition to the BCA Green Mark Scheme, the BCA Green Mark for Restaurants was introduced as a result of McDonald's interest and initiative to "green" their restaurants. As restaurants utilise high levels of energy and water resources on a daily basis, BCA viewed this as a good opportunity to introduce the new scheme to promote corporate responsibility as well as to recognise environmentally-friendly and sustainable practices in restaurants, taking sustainability beyond commercial and residential infrastructure.

Four outlets of global restaurant chain McDonald's were amongst this pioneer batch of restaurants to receive the accolade, in addition to American-style diner Brewerkz at Riverside Point. McDonald's at Bishan Park and Springleaf Tower clinched the Gold rating, while the outlet at City Square achieved a BCA Green Mark Certified rating. McDonald's at Jurong Central Park was also the first restaurant to be awarded the BCA Green Mark Platinum rating in Asia.

McDonald's states that its green movement in Singapore is an extension of its global green strategy of energy efficiency, sustainable packaging and waste management, and green restaurant design that has already made its mark in its global outlets in the United States and Europe.




"Similar to the BCA Green Mark for Office Interior, this latest Green Mark for Restaurant scheme is part of BCA's plan to place more emphasis on users' behaviour and cultivate them to play a greater role in Singapore's green building movement."

DR JOHN KEUNG, CEO OF BCA

"Sustainability is a core tenet of how we do business, and McDonald's is committed to helping the environment through advances in sustainable packing, energy conservation and Green restaurant design. We are proud to be the first restaurant to receive a BCA Green Mark Platinum rating, and we work towards creating a greener Singapore for ourselves and for our customers."

MS JUDY HARMAN, MANAGING DIRECTOR OF MCDONALD'S RESTAURANTS

McDonald's restaurant at Jurong Central Park was conceptualised as a green building from its planning stage. Various innovative strategies were incorporated into the restaurant's design, creating a stylish ambience through features such as a green roof and rain water harvesting system. The outlet at Jurong Central Park is among one of 12 BCA Green Mark tour sites showcased as part of the International Green Building Conference. 

BCA GREEN BUILDING EXHIBITION



HELD AT VIVOCITY FROM 22–25 SEPTEMBER 2011, THE 8TH AND FINAL INSTALMENT OF THE BCA GREEN BUILDING EXHIBITION ONCE AGAIN BROUGHT TO LIFE THE EXPERIENCE OF LIVING IN A GREEN HOME.

The four-day exhibition showcased useful green building tips and information for residents to make their homes more environmentally-friendly and achieve cost savings.

Mayor of South West District and Minister of State, Dr Amy Khor was invited to tour the exhibition, together with BCA's CEO and senior management directors.

Since the success of the first BCA Green Building Exhibition on 10 December 2009 at City Square Mall, seven more similar road shows have been conducted around Singapore. This is part of BCA's plan to place more emphasis on users' behaviour and encourage Singaporeans to play a greater role in the nation's green building movement.

The exhibition also highlighted three key developments in Singapore's green building movement. These include implementing initiatives under the first and second Green Building Masterplans, grooming more green collar professionals in the built industry, as well as showcasing professionals who have contributed to Singapore's built environment. **P**

BUILD IT GREEN CLUB



The Build it Green Club is a new outreach initiative by BCA to nurture green building advocates among youths and to promote greater awareness and understanding of green buildings among students. By joining the Club, young budding green advocates will gain access to exclusive invitations to a host of green building related activities.

Since its launch in July 2011, the Club has recruited 350 members. Some of the members even participated as student ambassadors to engage the public during BCA's recent green building exhibition at VivoCity!

If you are between 15–24 years old and have a keen interest in green buildings, we welcome you to join the Build it Green Club via BCA's Green Mark portal: www.greenmark.sg/builditgreen

GREEN SHOTS PHOTOGRAPHY COMPETITION 2011

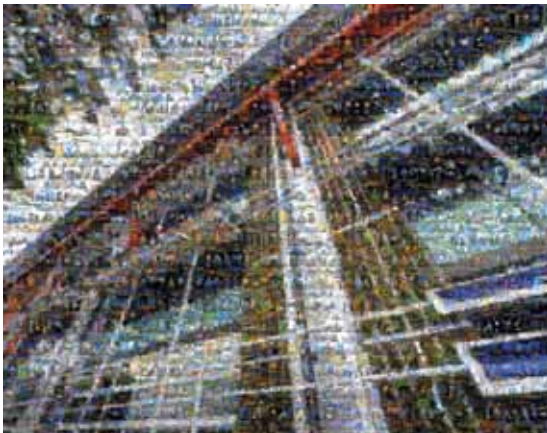
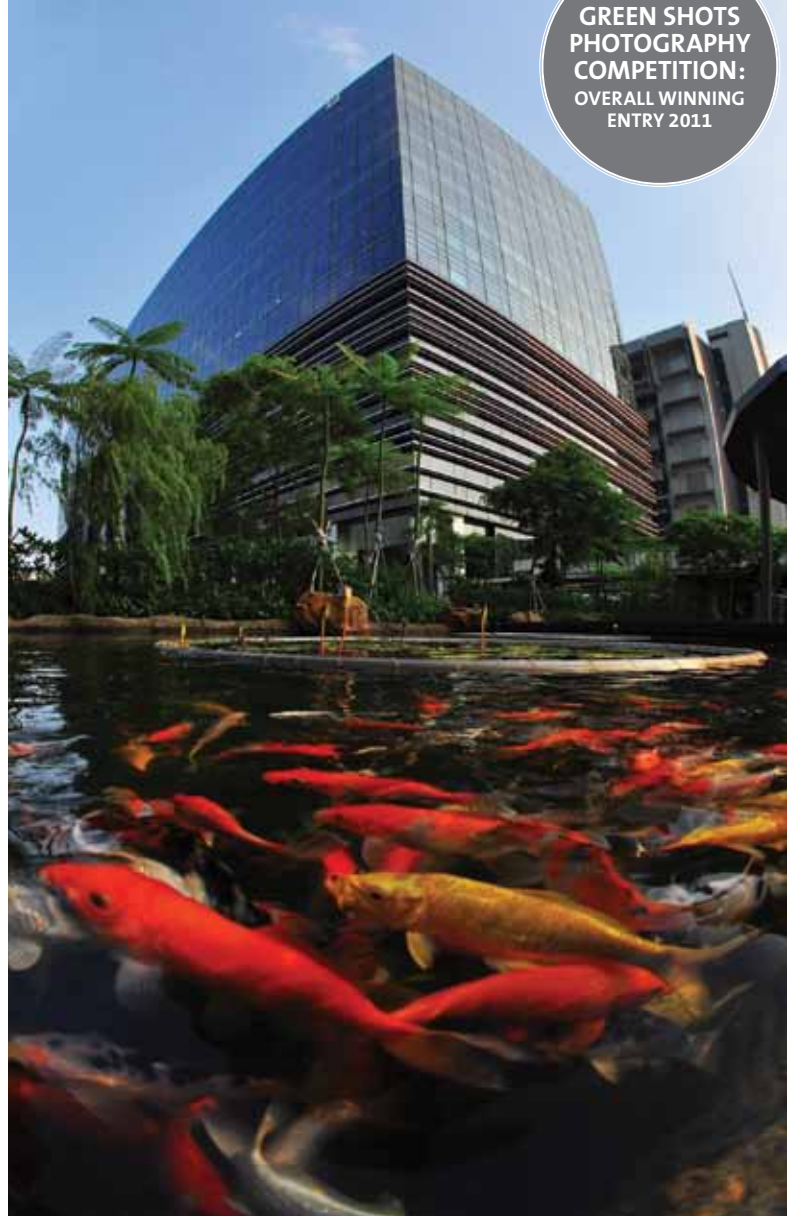
A first-of-its-kind photography competition by BCA to showcase green buildings.

Organised by BCA, in partnership with the Photographic Society of Singapore, the BCA Green Mark Photography competition "Green Shots" attracted more than 2,000 entries from over 600 photo enthusiasts. All of the approved entries were put together in a mosaic picture of the BCA Zero Energy Building and made available for online viewing by the public at anytime and from anywhere.

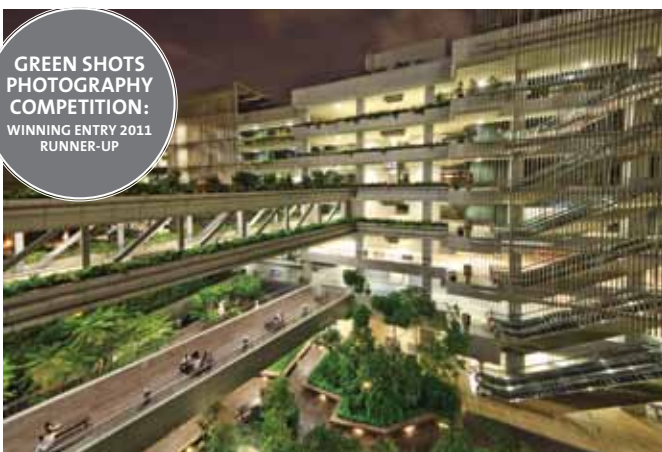
To generate public interest about BCA's green initiatives in a fun and interactive manner, users can easily share the link to the BCA Zero Energy Building mosaic on the competition website. The mosaic and winning photo entries were also displayed at the BCA Green Building Exhibition at VivoCity.



GREEN SHOTS PHOTOGRAPHY COMPETITION: OVERALL WINNING ENTRY 2011



Top | All approved photo entries were compiled into a mosaic picture of the BCA Zero Energy Building.



GREEN SHOTS PHOTOGRAPHY COMPETITION: WINNING ENTRY 2011 RUNNER-UP



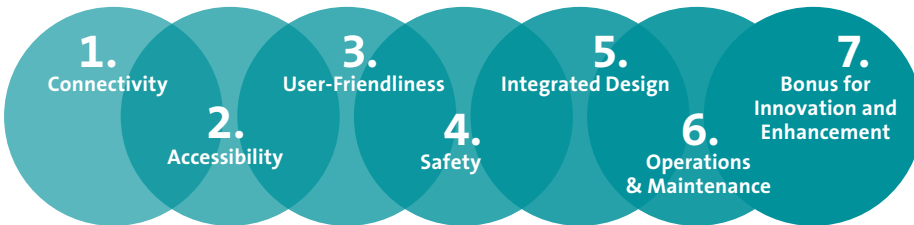
GREEN SHOTS PHOTOGRAPHY COMPETITION: WINNING ENTRY 2011 SECOND RUNNER-UP

CALL FOR NOMINATIONS

BCA UNIVERSAL DESIGN AWARDS FOR THE BUILT ENVIRONMENT

If your building or park is accessible, friendly and usable, by everyone – old and young, family and persons with different abilities – BCA would like to invite you to submit your project for the BCA Universal Design Awards for the Built Environment 2012.

BUILDINGS ARE AWARDED THE BCA UNIVERSAL DESIGN AWARDS BASED ON SEVEN KEY CRITERIA:



The awards aim to promote more friendly built environments by raising awareness among Architects, Building Owners and Developers on the importance of incorporating Universal Design in their developments.

For more information on the criteria of the awards, please log on to www.friendlybuildings.sg or email the BCA Universal Design Awards Secretariat at bca_bfa_upgrading@bca.gov.sg. All applicants are required to submit their applications online via the website by **5pm, 30 December 2011**.

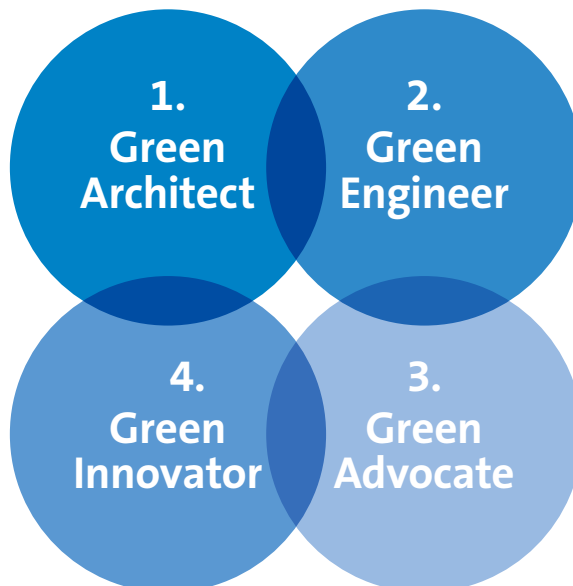
NOMINATION: BCA-SGBC GREEN BUILDING INDIVIDUAL AWARDS 2012

Nominations for the Green Building Individual Awards 2012 are now open!

Jointly awarded by BCA and the Singapore Green Building Council (SGBC), the award aims to accord recognition to individuals in the building and construction sector, for their consistent contribution and outstanding achievements in the development of a green and sustainable built environment.

We cordially invite professionals and individuals, across the industry's value chains, who have contributed immensely in the development of green and sustainable buildings to participate. The Green Building Individual Awards will be presented at the BCA Awards Night in May 2012. **The closing date for nominations is 16 January 2012, Monday.**

THE AWARDS COMPRISE FOUR CATEGORIES:



Application forms and details for the Awards can be found on the BCA website at www.bca.gov.sg.

If you need any clarification, please contact either:
Ms Vivian Sim
 DID: 6325 5924
 EMAIL: vivian_sim@bca.gov.sg
 or
Mr Tan Soo Huat
 DID: 6325 5022
 EMAIL: tan_soo_huat@bca.gov.sg

EVENT LINE UP

Certification Course in
BIM Modelling

05, 06, 18 JAN

BCA-REDAS Construction
& Property Prospects
Seminar 2012

11 JAN

Certification Course in
BIM Management

09-12 JAN

Certified QM/CONQUAS
Managers Course

11-13 JAN

Built Environment Scholarship,
Training and Career Fair

14 JAN

Risk Management Course
(BizSAFE Level 2)

16-17 JAN

Contract Drafting –
The Technicalities and Legalities

19 JAN

Building Control Regulation
for Site Supervisors

02 FEB

Essential Knowledge in
Construction Regulations
& Management for
Licensed Builders

13-15 FEB



Certificate in Construction
Productivity Management

16 FEB-29 MAR

BizSAFE Workshop
for Company CEO/
Top Management

21 FEB

3-Day Course on
Project Management

23, 24 & 28 FEB

Internal Audit (QEHS)
Course based on Quality
ISO 9001, Environmental
14001 & Health & Safety
OHSAS 18001

28 FEB

01, 06, 08, 13 & 15 MAR

Green Mark Professional
(GMP) Programme 2012

STARTING IN FEB 2012

SMU-BCA-WDA Productivity
and Leadership Development
Programme 2012 Intake

MAR-MAY 2012

Workplace Safety and
Health Management System
(BizSAFE Level 4)

19, 21, 26 & 27 MAR

Certification Course for
Green Mark Manager

22, 23, 26, 27 MAR

05 APR

BCA-REDAS-SGBC Green
Building Seminar

23 MAR

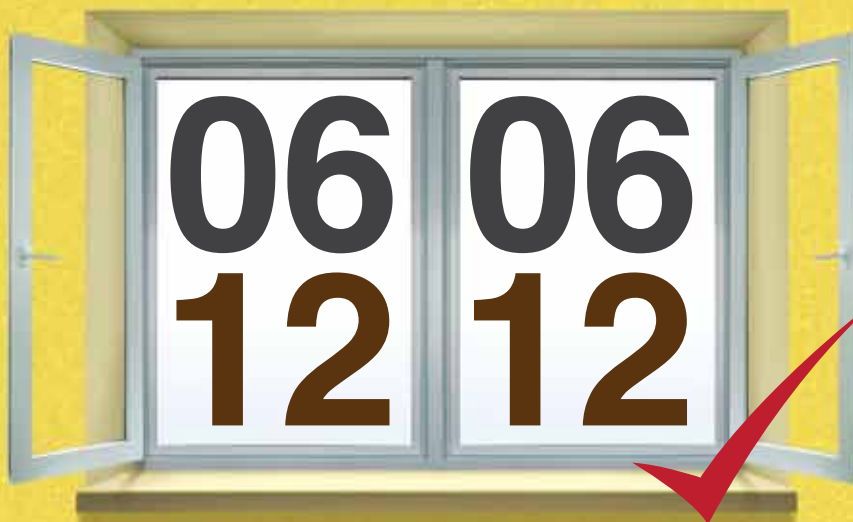


CONTACT:
**BCA ACADEMY – BUSINESS
DEVELOPMENT UNIT**

DID: 6248 9843/824

EMAIL: bca_academy@bca.gov.sg

WINDOWS SAFETY DAYS



Check - Clean - Change

Observe windows safety every 6/6 and 12/12.

In 2010, there were close to 50 window accidents due to poor maintenance. Don't wait till disaster strikes. Take 3 simple steps twice a year to keep your windows safe.

For Casement Windows

Check that the fasteners are not rusty or loose

Look out for

1

2

3

Clean and lubricate joints or movable parts

Change all rivets from aluminium to stainless steel by engaging an approved window contractor

For Sliding Windows

Check that the safety stoppers and angle strips are in their proper places

Look out for

1

2

3

Clean the tracks and ensure the window panels can slide smoothly

Change worn-out safety stoppers and angle strips by engaging an approved window contractor

To learn more about windows safety or find out the list of approved contractors:

- Visit www.bca.gov.sg/windows_safety (BCA) or www.hdb.gov.sg/windows_safety (HDB)
- Call 6325 8677 (BCA) or 1800 225 5432 (HDB)

