SIA Event:

The Functional Roof

The Roof is a major component in most buildings. Apart from aesthetic concerns, it is arguably the most important element protecting the occupants from the vagaries of the weather, be it the sun, rain or wind. The detailing and construction of the roof is therefore of utmost importance to the architect.

In recent years, the roof has taken on increased responsibility in reducing the heat load into the building as part of the trend towards sustainable design. A popular solution is to create a 'green' roof for the building. With different configurations and technology, the 'green' roof is fast becoming a roof typology of its own, with its own unique issues and concerns compared to the traditional concrete or metal roof form.

This seminar seeks to refresh the architect on the basics of good roof design and at the same time, explores the latest trends in creating a functional roof, be it concrete, metal or green.

EVENT DETAILS

Date : 25 October 2013, Friday

Time : 2.00pm - 5.00pm

(Registration will start from 1.30pm onwards with

light refreshment)

Venue : Singapore Institute of Architects

SIA Theatrette Level 1 79 Neil Road (S) 088904

BOA-SIA CPD: 4 CPD points

Seminar fees: SIA Members (\$50.00),

Non Members (\$100.00) (fees inclusive of GST)

Closing date : 21 October 2013

PROGRAMME SCHEDULE

1.30pm Registration with Light Refreshment

2.00pm Presentation by Ms Fatimah Akhtar,

Architect and LEED AP

2.40pm Presentation by Mr Alfred Lim Peng Huat,

Waterproofing Trade Association of Singapore

3.20pm Presentation by *Mr Wong Kee Lou*,

Kalzip Asia Pte Ltd

4.00pm Presentation by *Mr Ho Wan Weng*,

Verditecture Pte Ltd

4.40pm Q & A

5.00pm End of event

For more information, please contact SIA (Ms Jacey Tay):

Tel: (65) 6226 2668 Fax: (65) 6226 2663 Email: cpd@sia.org.sg

CPD PROGRAMME: 2013/096/MS/JT

Organised by:



^{**} Registration for attendance of seminar shall be closed 30 mins after the seminar commences.

SIA Event:

The Functional Roof



Ms Fatimah Akhtar Architect and LEED AP

Topic: "Roofs: Symbol, Function and Opportunities"

Brief Profile

Educated and trained in the National University of Singapore, registered architect with the Board of Architects, Singapore, LEED AP. She has more than fifteen years' experience living and working in several countries, i.e. Singapore, Hong Kong, Italy, Middle East and Japan. Through work experience with leading firms like Nikken Sekkei and Fosters gave an excellent technical knowledge as well as experience in application of new technologies for building assemblies. Her portfolio consists of large scale mixed used development, hospitality, healthcare and process architecture of multi billion project value. Currently, she is an external consultant providing specialised architectural skills like healthcare design to major architectural firms as far away as Australia. Her current projects include productivity studies for construction consortiums, research projects on building technologies and strategic planning studies prior to developmental studies.

Synopsis

Roofs are both functional and symbolic. It is an important element in our pursuit of sustainable design. As it is one of the largest components of a building structure, it offers opportunity for significant cost savings and productivity if engineered correctly.



Mr Lim Peng Huat Alfred President, Waterproofing Trade Association of Singapore

Topic:

- a. Types of Waterproofing System
- b. General RC Roof Detailing
- c. Special RC Roof Detailing.
- d. Interface with other component of the buildings.
- e. Roof Garden Detailing and requirement.
- f. Re-Roofing of RC Flat Roof Waterproofing System.
- g. General Defects of the Roof Waterproofing System.
- h. Potential Defects of the Roof Waterproofing System.

Brief profile

Mr Alfred Lim, has over 18 years of experience in installation and technical knowledge in waterproofing and special detailing on building joints and other interfacing components to the roof. Since 2006, he has been lecturing at BCA Academy on Good Industry Practices for both wet and external wall waterproofing. He is also the President of the Waterproofing Trade Association of Singapore for the past 5 years.

Synopsis

RC Flat Roof are both functional and symbolic. It is of paramount importance to pursuit the Appropriate and the Right waterproofing system for the RC Flat Roof to achieve sustainable design. Waterproofing elements of the RC Flat Roof affects the cost-time performance of the Roof adversely if designed efficiently.



SIA Event:

The Functional Roof



Mr Wong Kee Lou Kalzip Asia Pte Ltd

Topic: "Metal Roofing System Design Guidelines"

Brief Profile

Mr Wong Kee Lou is the Technical Sales Manager of South Asia at Kalzip Asia Pte Ltd. He received his professional degree in civil engineering and completed his master degree in civil & structural engineering at 2001 and 2004 from University Malaya, Malaysia. He has 7 years career experience in research & education institute and consultant firm. In the past 5 years career, he is the key technical person in Kalzip group for Asia Pacific Region which providing the design & technical solution either internally or externally. These have help him to develop the wide knowledge for providing holistic solution of metal roofing system both in technical and practical aspects. Since 2011, he is actively as a workgroup member of reviewing SS370 & CP89 in SPRING and task force member in Singapore Green Building Council (SGBC) Technical Coordination Committee.

Synopsis

Metal roofing system design guidelines are presented here to provide general design information to building owners, architects and builders for making prudent & informed decision.

A good practice of designing metal roofing system is to understand the performance requirement for any specific project or end use. The satisfactory performance of any metal roofing system depends on the correct selection of roof components, roofing sheet materials and detailing. This selection will determine the most economical & best practices to the project.

Weather tightness, durability, appearance and structural performance are the common performance requirements in roof design consideration. However, thermal and acoustic performance has become significant portion in roof designing especially the iconic project. The thermal performance is important because it affects the amount of energy required to cool the building and will influence the running cost. The good design of acoustic performance provides comfort to occupants from the unwanted sound. Besides other performance requirements may be considered in the design are fire performance, skylight and condensation. Understanding the performance requirement, it helps the designer for making prudent & informed decision and provides the most practical & economical solution to clients.



Mr Ho Wan Weng Verditecture Pte Ltd

Topic: "Roof Greenery for Different Roofing Types - Critical Success Factors"

Brief Profile

Mr Ho Wan Weng, a structural engineer by training, transformed the company from a small Sales & Marketing setup formerly known as ZinCo Singapore in 2003 into Verditecture, a regional expertise hub in skyrise greenery. He is passionate about skyrise greenery and has been advocating the gospel of greening urban cities as an invited speaker at international conferences and congresses including the World Expo 2010, Shanghai, and World Green Roof Conferences 2004 & 2009, Germany. Wan Weng was the appointed consultant of Singapore's National Parks Board CUGE in 2009 and 2011 in the drafting of skyrise greening industry guidelines.

Synopsis

The presentation covers the matrix of types of roof greenery vs roofing materials (such as metal and concrete) vs types of roof construction (such as flat and pitch roofs); focusing on the critical success factors on which roof greenery accrues in order to yield the economic and social benefits as claimed.



Application Form [SAP Code: 2RCS-4201060-013] **EVENT DETAIL** : The Functional Roof Seminar Date : 25 October 2013, Friday : 2.00PM - 5.00PM (Registration will start from 1.30pm onwards with light refreshment) Time Venue : Singapore Institute of Architects, SIA Theatrette Level 1 (79 Neil Road, Singapore 088904) BOA-SIA CPD: 4 CPD points : \$50.00 (SIA Members), \$100.00 (Non Members) - fees inclusive of GST Seminar fee Closing date : 21 October 2013 Please fax / email the completed registration form to Ms Jacey Tay: Fax: (65) 6226 2663 Email: cpd@sia.org.sg And follow up with cheque / cash / online payment to Singapore Institute of Architects. Please tick your mode of payment:] By Cheque] By Cash Bank/Chq #: Amt S\$: You can drop by SIA office to make cash payment between Local Cheque (must be drawn in Singapore) should be crossed 9.30am - 5.30pm on weekdays. and made payable to "Singapore Institute of Architects". [] By Online Payment Mail to SIA address: http://members.sia.org.sg/payment/sia-20131025.html Singapore Institute of Architects (It is mandatory to provide us with your Receipt ID # after your 79B Neil Road, Singapore 088904 credit card payment transaction) Please indicate your name, company/institution and course Receipt ID #: date/title on the back of the cheque. Participant's Detail Contact Person (if any): Organization: _____ Fax: _____ Email: ___ Tel:_ Receipt Mailing Address: S(**Full Name of Participant** (as per NRIC / FIN, pls underline surname) NRIC / FIN # **Email Amt** ☐ SIA Member, SIA #:[HP #: ☐ Non Member, BOA # (if any): [☐ SIA Member, SIA #: [HP #: ☐ Non Member, BOA # (if any): [] 3 HP #: SIA Member, SIA #: [1 HP #: ☐ SIA Member, SIA #: [] Non Member, BOA # (if any): [] **Please take note that all the above fields are mandatory. Incomplete form will not be process. Registration will be on a First-Come-First-Served basis and will be accepted Cheque payment for this activity should not be combined with payment for other SIA upon receipt of registration form and payment to SIA. Registration by fax will events/courses. only be confirmed upon receipt of payment. Fees paid are non-refundable under all circumstances. Replacement of participant will be allowed only if written notification is made at least 3 days before the event. **Registration Confirmation No.:-**Where a Non-Member replaces a Member (must be from the same Org.) the fee

difference will have to be made good to SIA prior to the event.

Registration for attendance of seminar shall be closed 30 mins after the seminar

