## **SIA Event:**

# **Integration of M&E Services in Building**

The design-construction process in Singapore is driven by pressures of capital expenditure and construction schedule. Mindset and discipline boundaries between architects, engineers and contractors often limit drawing board communication that is necessary for good design and optimum performance of buildings.

Proper planning and coordination of M&E services are central to the success of operation and maintenance of building projects. Generally, architect designs the building and spaces; Structure Engineer design the structure of that building and space; M&E engineer designed the various operating system to make the building comes alive, and the landscape architect put in the various greenery.

Each discipline contributes to the success of the building aesthetics, operational efficiency, optimal building maintenance and the building life cycle.

The integration of M&E services and coordination in the building is an important part of the integration design process across all phases of the design-construction process. The timeline is usually punctuated by periodic charrettes or workshops at which the team collectively work through to a collaborative and consultative approach to decision making, peer reviews, trade-off and conflicts between goals.

This seminar brings to you an understanding of this integration at each phase of the design construction process.

#### **EVENT DETAILS**

Date : 12 September 2014, Friday

Time : 2.00pm - 5.00pm

(Registration will start from 1.30pm onwards with light refreshment @ Level 4 - Y Terrace)

Venue : YMCA International House

One Orchard Road, (S) 238824

Tan Chin Tuan Function Room 1 (level 4)

#### (Nearby carparks:

http://apex.sia.org.sg/xshare/YMCA Carpark Nearby.pdf

BOA-SIA CPD: 4 CPD points

PEB PDU : 3 PDU points

Seminar fees: SIA Members (\$70.00),

Non Members (\$140.00)

(fees inclusive of GST)

Closing date : 08 September 2014

### **PROGRAMME SCHEDULE**

1.30pm Registration with Light Refreshment

2.00pm Presents by Mr Yeo Eng Choon, Yang

**Architects International Pte Ltd** 

Topic: "M&E Co-ordination - The Architect's

Role"

2.40pm Presents by Mr George Ng, BECA Carter

Hollings & Ferner (S.E. Asia) Pte Ltd

Topic: "Introduction to Building Services"

3.20pm Presents by Mr Winston Ho, Aurecon

Singapore (Pte) Ltd

Topic: "Integrating M&E services with

Architectural Design"

4.00pm Presents by **Mr Wong Kok Chye, Linair** 

**Technologies Limited** 

Topic: "Mechanical Electrical & Plumbing

 $(\mathsf{MEP})\ \mathsf{Co}\text{-}\mathsf{ordination} - \mathsf{Contractor's}$ 

Perspective"

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

Organized by:

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CPD PROGRAMME: 2014/074/MS/JT GST REG. NO.: M9-0001281-J G.N. No. 565 in Gazette No. 27

<sup>\*\*</sup> Registration for attendance of seminar shall be closed 30 mins after the seminar commences.

# Integration of M&E Services in Building



Topic: M&E Co-ordination – The Architect's Role

## Speaker Brief:

**Yeo Eng Choon** is the director of Yang Architects International Pte Ltd and has a 1st class honour architectural degree from the University of Newcastle in 1996. He had 40 over years of experience in the construction industry and has equipped himself with skills in all levels from project management, technical management, and design management to administrative management covering a wide spectrum and area of responsibilities. He had designed and worked on a wide range of projects covering residential, institutional, industrial, commercial and religious buildings. He is a registered ASEAN Architect, and a member of the Singapore Green Building Council.

#### Synopsis:

M&E co-ordination is an important part of an integrated design process across all phases of the design-construction work of a building/project. An integrated design process approach result in efficient uses of resources, cost and economy and operational efficiency resulting in good aesthetic, functionality, cost effectiveness are all optimized and negotiated for a holistic outcome to benefit all stakeholder including the building occupants and operators over the life of the building.



**Topic: Introduction to Building Services** 

#### Speaker Brief:

**George Ng** is a Senior Associate Director from Beca Carter Hollings & Ferner (S.E. Asia) Pte Ltd. He has a Bachelor of Engineering (Mechanical) degree from University of Newcastle. George has been in the building industry for more than 18 years. He has 8 years of M&E site co-ordination experience before his change to M&E consultancy work. George had design and manages M&E system for various types of projects including shopping mall, hotel and institution.

#### Synopsis:

Building services has become a necessity in modern building. Our daily needs for power, water, human comfort and safety are provided through various system of building services. Basic knowledge of M&E system work flow and space requirement would lead to better space and plant efficiency. This seminar serve to provide a basic understanding of the various building services system and the points to note when planning M&E equipment or plant room space.



## **SIA Event:**

# Integration of M&E Services in Building



Topic: Integrating M&E services with Architectural Design

### Speaker Brief:

**Winston Ho** is a Registered Professional Mechanical Engineer. He has more than 17 years of experience in industry. He is responsible for resolving technical matters and compliance of the design in the mechanical services in relation to the various authorities' requirements

### Synopsis:

The biggest dilemma faced by design teams is the effective integration of architectural design with M&E services. What happens when functionality is sacrificed for aesthetics? And vice versa? What is the impact on the cost, performance, and maintenance of the building during operations? This presentation will cover some fundamentals of M&E services design, as well as some good design practices to maximise the performance of the M&E services. Winston will also discuss how form and function need not always be in conflict and how BIM (Building Information Modelling) can be a useful tool for enhancing integration. Some project examples of good/bad integration will also be showcased for discussion.



Topic: Mechanical Electrical & Plumbing (MEP) Co-ordination – Contractor's Perspective

#### Speaker Brief:

**Wong Kok Chye** is the Group CEO of Linair Technologies Limited and Director of Air System Technology (S) Pte Ltd, a BCA L6 registered MEO1 and ME15 contractor. He graduated from Queen's University of Belfast with a Bachelor in Mechanical Engineering and has served in the Building Services Industries for 20 years. He was a Mechanical consultant with Rankine & Hill from 1994 to 2000.

#### Synopsis:

Mechanical Electrical & Plumbing Services Coordination – Contractor's Perspective



Application Form [SAP Code: 2RCS-4201060-017]

	EVENT I	DETAIL	GST REG. NO.: M9-0001281-J G.N. No. 565 in Gazette No. 27
Seminar : Integration of M&E Services in Building Date : 12 September 2014, Friday Time : 2.00PM - 5.00PM (Registration will start from 1.30pm onwards with light refreshment @ Level 4 - Y Terrace) Venue : YMCA International House [One Orchard Road, S(238824)] - Tan Chin Tuan Function Room 1 (level 4) (Nearby carparks: <a href="http://apex.sia.org.sg/xshare/YMCA">http://apex.sia.org.sg/xshare/YMCA</a> Carpark Nearby.pdf) BOA-SIA CPD : 4 CPD points / PEB PDU Accreditation : 3 PDU points Seminar fee : \$70.00 (SIA Members), \$140.00 (Non Members) – fees inclusive of GST Closing date : 08 September 2014			
Please fax / ema Tel: (65) 6226	il the completed registration form to Ms Jacey Tay: 5 2668 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:			
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**Please take note that all the above fields are mandatory. Incomplete form will not be process.  Total:			
Cheque payment for this activity should not be combined with payment for other SIA events/courses.  Fees paid are non-refundable under all circumstances. Replacement of participant will  Registration will be on a First-Come-First-Served basis and will be accepted upon receipt of registration form and payment to SIA. Registration by fax will 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 for attendance of seminar shall be closed 30 mins after the seminar

Registration Confirmation No.:-

