



## **BUILDING INSPECTION TRAINING COURSE**

**Inspection** of buildings is becoming a necessity for newly handed over properties as well as for old buildings for maintenance purposes. With rising consumer expectations on quality workmanship, and for continuous proper maintenance & management of properties there is a demand for and in need of regular inspections to help look out for building defects that - IF go unreported or undetected - may bring financial and social impacts to the owners and residents.

### **Course Objective:**

To train to conduct property condition assessment and prepare a Property Inspection Report.

### **Skills-Training:**

Participants will be trained to conduct systematic and thorough visual inspection using a 'defects-diagnosis' methodological framework and detection techniques for buildings, and defects report writing skills.

### **Benefits and Impacts to the Trainees:**

#### **Upgrade of Skills and Knowledge**

Trainees are trained on identification of defects and defects diagnosis. This training exercise will sharpen the skills and knowledge on correctly identifying building defects for the right rectification methods.

#### **Advancing better building/construction practices**

Actual inspections are carried out at actual buildings each with their own set of building defects and issues factored by age and conditions of use. This training enables trainees to review their construction and/or design practices in relation to the local Building By-laws and Codes, especially with regards to the maintenance of the property throughout its life-cycle, and health and safety issues to the occupants.

## **COURSE OUTLINE**

### **Module 1:**

Overview of Inspection, Required Equipments and Technical Information  
Workmanship Quality Benchmarking  
Inspection for Vacant Possession & Defect Liability Period  
Unresolved Building Defects

### **Module 2:**

Property Inspection Reports  
Objectives  
Approach  
Reference Documents and Plans  
Scope and Areas of Inspection  
Building Elements and Services  
Inspection Checklist: Identifying and Analysis of Defects

### **Module 3:**

#### **M&E Inspection**

Objectives  
Approach  
M&E Audit Process Flow  
Air-conditioning & Mechanical Ventilation System  
Plumbing, Sanitary & Drainage System  
Fire Protection System  
Elevator System  
Electrical & Electronic System  
Lighting System  
Others Available System

### **Module 4**

#### **C&S Inspection**

External Works  
Roads & Drains  
Slopes: Earthslopes & Rockslopes  
Sewerage  
Water Supply  
Building Works  
Sub-Structure  
Super-Structure  
Roof  
Cause of Structural Defects  
Severity of Defects

### **Module 5:**

#### **Establishment of Cost Of Remedial Work**

Outline of the Building Inspection Report  
Qualification and Certification of defects  
Recommendation and establishment of remedial works  
Estimation & establishment of cost  
Methodology of costing  
Legal Implications and Settlement of disputes

### **Module 6:**

Advanced Investigative and Forensics Inspection  
Case Studies

## **PROVISIONAL PROGRAMME**

### **DAY 1:**

#### **9.00am – 12.00pm**

- Module 1,2,3,4

#### **2.00pm – 5.00pm**

- 1<sup>st</sup> Practical Building Inspection Training on Actual Site – Completed House
- Report writing

### **DAY 2:**

#### **9.00am – 12.00pm**

- 2<sup>nd</sup> Practical Building Inspection Training on Actual Site – Commercial/Stratified Property
- Report writing

#### **2.00pm – 5.00pm**

- Module 4 & 5

## **Building Inspection Training Course**

**22-23 February 2021**

**Malaysia Productivity Corporation**

Lorong Produktiviti

Off Jalan Sultan

46200 Petaling Jaya

Selangor

## **PROGRAMME (PROVISIONAL)**

### **BASIC COURSE**

#### **Date : Day 1**

8.30am Registration

8.45am – 9.15am Module 1:  
Overview of Building Inspection Information – *Ar Anthony Lee Tee*

9.15am – 10.00am Module 2:  
Building Condition Inspection: Technical Info, Equipment, Scope of Works - *Ar Anthony Lee Tee*

10.00am – 10.30am **Tea Break**

10.30am – 11.30am Building Condition (Crack) – *Ar Ezumi Harzani Bin Ismail*

11.30am – 12.15am Overview of Painting Work – *Ar Anthony Lee Tee*

12.15am – 1.00pm Infrared Thermography for Building Inspection – *Mr Othniel Lim*

1.00pm – 2.00pm **Lunch Break**

2.00pm -3.00pm MPC

3.30pm – 4.15pm Module 4:  
Intro and Tools for Building Services – *Ir Kok Yen Kwan*

4.15pm – 4.30pm **Tea Break**

4.30pm – 5.00pm Module 3:  
Building Inspection: Identifying, Analysis of Defects - *Ar. Anthony Lee*  
*Tee* Writing Inspection Workshop.

END DAY

### **ADVANCED COURSE**

**Date : Day 2**

Address: **SITE ADDRESS FOR PRACTICAL INSPECTION**

9.00am – 11.00am 2nd Practical Inspection – Common Areas/Building

### **BACK TO CLASSROOM**

12.00pm – 1.00pm **Lunch**

1.30pm – 2.00pm Structural Issue – *Ir Ng Khiam Choo*

2.00pm – 3.00pm Mechanical and Electrical Inspections– *Ir Kok Yen Kwan*

3.00pm – 4.00pm 'Kisah Benar' – *Ar Anthony Lee Tee*

4.00pm – 4.30pm **Closing & Tea Break**

END DAY 2

***While every effort is made by the organisers to ensure programme is accurate, the organisers reserve the right to reschedule the programme subject to prevailing circumstances.***



## CERTIFICATE OF COMPLETION

This is to certify that

*SAMPLE ONLY*

has successfully completed the

### **Architect Centre Building Inspection Training Basic Course**

on

*31 March 2011*

at

*Akademi Binaan Malaysia, Kuala Lumpur*

*President*

Pertubuhan Akitek Malaysia

*Director*

Architect Centre Sdn Bhd



### Ar. Anthony Lee Tee

Accredited Architect & Trainer  
Independent Building Inspection & Forensics  
For Architect Centre S/B.



**Ar. Anthony Lee Tee**, B. Arch (UNSW) founded his own practice ACA (Project Management) S/B and LEE TEE ARCHITECT in 1995; has since been providing Development Project Management and Architectural Consultancy services in Government-linked projects, hotels, commercial and housing projects.

He believes every property owner should be entitled to the best quality and workmanship the construction industry can provide and to achieve this requires the dedication, effort and professionalism of the entire team of Developer, Architects, Engineers, Building Contractors, Sub Contractors and suppliers.

Ar. Anthony Lee Tee is promoting **Architect Centre S/B**, a subsidiary of the Malaysian Institute of Architects (PAM) and ArchiCentre Ltd. Australia as an accredited Architect and Trainer in providing this pioneering Independent Building Inspection and Advisory service made available to everyone for the 1<sup>st</sup> time in Malaysia; and will present an Architect's Perspective and his shared concerns on the declining Quality in MALAYSIAN Properties.

### **Ar. Ezumi Harzani Ismail**

B.Sc (Hons) HBP, B.Arch (USM), M.Phil (Policy) UTM

Ezumi Harzani is the Chairman of Architect Centre Sdn Bhd (ACSB), Immediate Past President of Pertubuhan Arkitek Malaysia (PAM) and a board member of Board of Architects Malaysia (LAM). He is also an Accredited Inspector with ACSB, sits as a member of the Focus Group in Dealing with Construction Permit (FGDCP) and as the Advisory Board member of Kuala Lumpur City Hall from 2015 to 2019.

He is also a Director of Arkitek MAA Sdn Bhd and he led the implementation of various projects, including hospitals, apartments, office buildings and MRT stations. He is also a recipient of the Royal Institute of British Architects (RIBA) President's Medal. He graduated with Bachelor of Architecture from University of Science Malaysia, and Master of Philosophy (Policy Studies) from University of Technology Malaysia.



## Ar. Steven Thang Boon Ann

Accredited Architect & Trainer  
 Building Survey and Inspection  
 Building Forensic Investigation (Expert Witness)

Bachelor of Architecture – University of Louisiana (formerly known as Univ. of Southwestern Louisiana) Lafayette, Louisiana, USA



Co-Chairman, PAM Practice and Project Committee  
 Committee Member, PAM Conservation and Heritage Committee  
 Member, SIRIM Industry Standards Committee On Building And Civil Engineering (ISC D) 2  
 Chairman, SIRIM, TC on Ceramic Materials and Sanitary Fittings  
 Chairman, SIRIM, TC (TC59) on Building Design and Construction  
 Member, SIRIM, TC on Coating  
 Member, SIRIM, WG on Measurement  
 Member, SIRIM, WG on Basement Parking  
 Member, CIDB, TC on Environmental Prevention  
 Member, SIRIM, WG for CAD Data exchange  
 Member, CIDB, Strategic Thrust 1, Sub Working group 3  
 (ST 1 – SWG 3), Construction Industry Master Plan (CIMP)  
 Member, Min. of Human Resources, TC on Guidelines on Prevention of Falls at Work Site  
 Alt. Member, Malaysian National Standards Committee (MyNSC), Dept. of Standards, Min. of Science, Technology, and Innovation

## Ar. Menaha Ramanath

Accredited Architect & Trainer

B. A. Architecture (Hons. Second Upper) Post. Diploma Architecture  
 University of Portsmouth UK

Fellow, Pertubuhan Akitek Malaysia (PAM)  
 Professional Architect, Lembaga Akitek Malaysia (LAM)  
 Chartered Member, Royal Institute of British Architects (RIBA)  
 Council Member PAM (1988 - 1990)  
 Co Chairperson, Building Committee PAM (1988 - 1990)  
 Co Chairperson, Secretariat and Finance, PAM (1988 - 1990)  
 Member, Association of Project Managers, MAPM London  
 GBI Facilitator, Greenbuildingindex Sdn Bhd  
 Project Management and Quality Management Consultant  
 Fellow, Malaysian Institute of Arbitrators, MIARB  
 Panel of Arbitrators, PAM  
 Panel of Arbitrators, LAM  
 Panel of Arbitrators, KLRCA  
 Panel of Mediators, KLRCA





**Ar. Heng See Imm**  
(APAM, LAM, MMIArb)  
Accredited Architect

**Adjudicator**

Kuala Lumpur Regional Center For Arbitration(KLRCA), 2/2013

**Diploma In International Arbitration**

Brickfields Asia College, 9/2012

**Introductory Certificate In Arbitration**

Chartered Institute of Arbitrators (CIArb), 8/2011

**Chartered Architect**

Board Of Architects Malaysia, 12/2011

**Certificate Of Completion Green Building Index Facilitator Course**

Green Building Index Sdn. Bhd., 12/2009

**Bachelor of Architecture (Housing, Building & Planning)**

University Science Malaysia, 5/2003 - 5/2005

**Bachelor of Science (Housing, Building & Planning)**

University Science Malaysia, 5/1999 - 5/2002



**Ir. Ng Khiam Choo**  
known as Ir. KC Ng

**Accredited Panel Civil & Structural Consultant Engineer**

Academic Background: Graduated with Bachelor of Applied Science in Civil Engineering in year 1985, Canada.

Engineering Practice: - Worked in a Building Contractor company as a site engineer during the first 3 working years in the Construction Industry (1986-1989).

Joined a well established Civil & Structural (C&S) Consulting Engineers company named Tahir Wong S/B in 1989 and practiced as a Consulting Engineer for 18 years.

Founded Perunding JES, a Civil & Structural Consulting Engineers company in year 2007 which provides C&S Engineering Consultancy services.

Since mid-2009, he has been involved in C&S Building Inspection works as a panel Consultant of Architect Centre S/B.





## Ir. Kok Yen-Kwan

B.Eng (Hons) Elect. Eng, M.Sc.  
PEng, MIEM, CEng, MIET, MCIBSE, MMGBC  
GBIF, ST-Registered Elect. Energy Manager (REEM)

**Accredited Engineer (Electrical)**



Ir. Kok Yen-Kwan @ Yen graduated with both his B.Eng (Hons) and M.Sc from the University of Liverpool, United Kingdom. Upon graduation, Yen's career path brought him to two established Mechanical & Electrical (M&E) Engineering Consultancy Firms, learning the fundamental job scope and responsibilities of a consulting engineer.

He is currently focusing his work on sustainability, energy management and also building inspection audit.

On a professional level, he is a current Board Member of the Malaysia Green Building Confederation (MGBC) and chairs the Standing Committee on Events; and is also a registered GBI Facilitator (GBIF) with GreenBuildingIndex Sdn. Bhd. and Electrical Energy Manager (EEM) with the Energy Commission of Malaysia.

## Ir. Kok Yee Hin

**Accredited Panel Mechanical & Electrical Engineer**

### **Professional Affiliations:-**

Professional Engineer, registered with Board of Engineers Malaysia (BEM)  
Fellow of the Institution of Engineers Malaysia (FIEM)  
Chartered Engineer (CEng), registered with Engineering Council, United Kingdom  
Member of the Institution of Engineering & Technology (MIET), United Kingdom  
Chartered Professional Engineer (CPEng), registered with Engineers Australia  
Member of Engineers Australia (MIEAust)  
Professional Member of Malaysia Green Building Confederation (MMGBC)  
Member of Malaysian Energy Professionals Association (MMEPA)  
ASEAN Engineer, registered with ASEAN ENGINEERS REGISTER (ASEAN Eng.)



### **Other Engineering Certifications:-**

Certified Competent Electrical Engineer (no restrictions), registered with Energy Commission Malaysia  
Certified Electrical Services Engineer (up to 33kV), registered with Energy Commission Malaysia  
Registered Electrical Energy Manager (REEM), registered with Energy Commission Malaysia  
Certified Level 1 Infrared Thermographer, registered with Infrared Training Centre  
Accredited Green Building Index (GBI) Facilitator, registered with GreenBuildingIndex Sdn Bhd  
Certified Energy Manager, Asean Energy Management Scheme (AEMAS)



## Ir Thin Choon Chai

Trinity College, Dublin  
 Bachelor of Arts, Bachelor of Engineering Science (Mechanical)  
 Corporate Member, Institution of Engineers Malaysia  
 P. Eng registered with the Board of Engineers, Malaysia  
 Member, Institution of Fire Engineers (Malaysia Branch)  
 Accredited engineer with Architect centre, PAM for fire safety audit.



### Accredited Engineer (Electrical)

Professional Engineer with 35 years of experience in the field of fire protection. Contributed to the drafting of numerous Malaysian Codes and Standards relating to Fire Protection Equipment and Systems.

Has conducted courses in the field of fire protection for Bomba and also the fire industry.

Was a member of the Royal Commission of Enquiry for investigating the Sungai Buloh fireworks factory explosion in 1991.



## Ir. Soong Peng Soon

Accredited Panel Mechanical & Electrical Engineer  
 Lead Green Building Index (GBI) Commissioning Specialist (CxS)  
 B. Eng (Mechanical) from University of Malaya, Honours Degree  
 P. Eng - Professional Engineer registered with Board of Engineer Malaysia (BEM)  
 MIEM - Member of Institution of Engineers Malaysia (IEM).  
 MASHRAE – Member of American Society of Heating, Refrigerating and Air-Conditioning Engineers  
 Career specialization: More than 25 years of solid experience in HVAC and building services industry with international exposure. Areas covered from design, manufacturing to site installation, operation & maintenance.  
 Building systems commissioning specialist.



### Sr. Tony Thang

Accredited Panel Quantity Surveyor  
 BSc (Hons) (UK); MISM, MRICS  
 Chartered Quantity Surveyor,  
 Registered Quantity Surveyor with the Board of Surveyors  
 (Malaysia)  
 The Proprietor of TAQ-SURVEYORS, a consulting  
 Quantity Surveying Practise since 1988.  
 Highlight of Career in similar field:  
 Been involved as an Expert Witness in Contractual  
 Disputes  
 both in Arbitration and Court Proceedings for the past 15  
 years;  
 Been also involved in any Due Diligent studies pertaining  
 to Building Condition Survey, Defects / Remedial Works  
 costings for settlement of Disputes and Claims; and  
 Advisory / Consulting role Arbitration matters.



### Othniel Lim Soon Weng

**B. Eng (Hons) Mech Eng**  
**Level 2 Thermographer (ITC)**

ITC Level II Certified Infrared  
 (certified by Infrared Training Centre) Diploma in Laser  
 Alignment  
 (certified by Damalini AB)  
 Vibration Analysis Level I  
 (certified by Universiti Teknologi Malaysia)  
 Train The Trainer  
 (certified by Human Resource Department Malaysia)  
 Airborne Ultrasound Inspector Level 1  
 (certified by UE Training Systems Inc.)  
 Perakuan Kekompetanan Sebagai Penjaga Jentera Kategori A0  
 (certified by Suruhanjaya Tenaga Malaysia)



### Main Area of Responsibilities

Performed condition monitoring site inspection for various industries (manufacturing, oil & gas, building, government, and etc) and various applications (electrical, mechanical, pipe work and insulation, refractory, building, research and development, etc).

- Identify, plan and route infrared thermographic inspection with customer and ensuring proper safety precautions and standards are adhered to.
- Identify proper PPE used and safe working distance to conduct inspection.
- Have experience in using various models of infrared camera to conduct infrared thermography inspection such as FLIR ThermoCAM PM 390, PM695, P60, P65 and E2. Ensure correct application on site and the right tool such as furnace tube inspection, refractory inspection etc.
- Lead teams to conduct infrared thermography inspection including opening of electrical panels or to follow process flow of an installation or plant. .

**Rhagib Azmi**  
**Lift Specialist**

Raghib Azmi Grad IEM has more than 25 years of experience in the lift and escalator industry having served in various capacities in sales, installation, maintenance and general management for leading lift companies both locally as well as overseas. Involved in various roles in several major high-rise projects such as Petronas Twin Tower, Burj Khalifa, India Tower, Kingdom Tower and Menara Warisan. He has actively served The Institution of Engineers, Malaysia (IEM) in various committees since 1993 and regularly conducts talks and courses at IEM in the VTS subject. He is the Chairman of the SIRIM Working Group on Lifts and Escalators and has been representing IEM in the WG since 2000 actively involved in the development of Malaysian Standard for lifts and escalators. He is an accredited VTS Specialist on Architect Centre Sdn. Bhd. Panel and conduct VTS audits and inspections.





## PREVIOUS TRAININGS



Trainees writing their inspection reports after site inspection



Trainees learning to identify and report on defects at building facades



Trainees learning how to take measurement and recording of defects with inspection tools



Trainer pointing out cracks on the wall—are they serious or not serious cracks?



Trainer showing how to measure floor levelness with a spirit level ruler



Live interview with Mr. Tee, the Joint Management Body Chairman of the property

**Feedback from past trainees**

- *As a course participant, learned a well-established inspection system.*
- *Excellent. It's an eye-opener to all especially to Architects. Should have more training like this.*
- *Appreciate that trainers were keen to share knowledge and experience, and interested to teach trainees hands-on inspection.*
- *Very informative and formulative training. More contractors should attend the course.*
- *This course is timely in view of the building industry is now facing a transformation.*

**Other customised training programme offered:**

1. Effective and Efficient Quality Assurance & Certification System (QAQC) for On-going Projects: From Award to Completion
2. Basic PAM Form of Contracts, Role of Clerk-of-Works and Supervisor
3. How to be an Effective Clerk-of-Works and Site Supervisor
4. Inspector-of-Works Mentorship Course
5. The Art of Conducting Effective Meetings for Architects as Superintending Officer