

Date: 23 July 2021 (Friday)
Time: 8.30 am to 12.50 pm
Mode of Delivery: Online via Zoom Meeting
Limit to 40 pax per run
CPD: 4 PDU approved
Fee: \$40 nett per pax

Registration Link
<https://forms.gle/oMVcJyxWXeWoyGH57>

COURSE OBJECTIVES

The objectives of this series of presentations is to review the current need of Air-Conditioning and Mechanical Ventilation (ACMV) systems to conserve energy, highlight their advantages and address the challenges posed to apply them successfully in the tropical climate like Singapore. The options to be discussed include chilled beam systems, thermal displacement ventilation (TDV) and under-floor air distribution (UFAD) systems.

In view of the current pandemic which has greatly affected businesses and social life, ventilation effectiveness is one of the available tools to help minimise the infection rate in the work space and in schools. This will also be discussed with the current trends of ACMV systems to determine the optimum ventilation rate to help reduce infection risk in accordance to the European Standard EN 16798-1.

COURSE CONTENTS

1. Chilled Beam Systems in the Tropics

Synopsis: Although Chilled Beam Systems have been widely used in many western countries since the early 1990s, particularly in Europe, its adoption in South East Asia has very slow. This presentation attempts to address the main concern which relates to condensation risk with such systems, especially in the tropics. Working experiences of existing chilled beam systems in this region will be discussed to highlight the opportunity to reduce energy consumption and building costs with such systems when compared to conventional CAV systems.

2. TDV and UFAD Systems in the Tropics

Synopsis: TDV and UFAD Systems are relevant for projects in the South East Asia region, especially for office buildings, light industrial buildings and shopping malls since the introduction of green building certification program in many countries in this region. These systems could potentially offer much cost saving opportunities in terms of reduction in energy consumption and building costs plus better indoor air quality compared to conventional overhead ACMV systems.

3. Challenges of Air Distribution in times of the Covid-19 Pandemic

Synopsis: To discuss the importance of mechanical ventilation and strategies available to improve ventilation effectiveness to minimise the risk of infection in the public areas in order for businesses and schools to continue operation to some degree of normality to help maintain a sustainable economy. Calculation method will be introduced in the presentation to determine the optimum ventilation rate needed to reduce the risk of infection.

TRAINER



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Academic Qualifications:

BSc Degree in Building Services Engineering (Northumbria University, UK), 1987.
Diploma in Acoustic and Noise Control (Institute of Acoustics, UK), 1989.
Certificate in Quality Management (Institute of Quality Assurance, UK), 1989.
Master of Business Administration (Maastricht School of Management, Netherlands), 2009.

Kenneth is a qualified Chartered Building Services Engineer with more than 30 years working experience in the building services industry. After completion of his first degree, he started his career in the UK as a M & E Design Consultant for a period of 10 years before he returned to Malaysia in 1997.

Upon his return, he joined TROX Malaysia Sdn. Bhd., a multi-national manufacturer of air-conditioning components and systems. He is responsible for product research and development, product testing and certification and technical support and training.