

**Report on Building Audit: Structural Assessment**
by Ir. Chong Chee Meng

Ir. Chong Chee Meng is currently the Deputy Chairman of Civil and Structural Engineering Technical Division (CSETD).

The Civil and Structural Engineering Technical Division (CSETD) organized an evening talk on 'Building Audit : Structural Assessment'. The talk was held on 4th August 2016 at Auditorium Tan Sri Prof Ching Fung Kee, Wisma IEM. The speaker was Ir. Dr Tan Kuang Leong, who has a wide range of knowledge in research and development, construction experience and building design particularly in the field of cement and concrete technology.

This talk was chaired by Ir. Chong Chee Meng, the Deputy Chairman of CSETD and was attended by 64 participants. The 64 participants included engineers from engineering consultants, contracting firms, government agencies and local authorities as well as faculty members from local institutions of higher learning.

Dr Tan commenced his talk by explaining the reasons people carried out building audit such as change of building's functionality, change of building's owner, dispute between 2 parties, etc. Dr Tan also stressed that it is local authority's requirement stipulated in Street, Drainage and Building Act 1974 & Act 133, Section 85A that any building exceeding five storeys and any storey of a building which is or at a level lower than the ground storey shall be deemed to be a storey, need to be audited after the tenth year commencing from the date the certificate completion and compliance (CCC) in respect of the building was issued.

Dr Tan also clarified that the building audit should be carried out by Professional Engineer with Practicing Certificate under civil and structural engineering discipline. Dr Tan informed that there were 2 stages of inspection. Stage 1 which was visual inspection of the building including a visual survey of the condition of the building and its structural elements and addition or alteration to the building and its structural elements.

Stage 2 was full structural investigation on the building including investigation in respect of its structural elements, if structural stability or integrity of any parts of building in doubt. The full scope of work of stage 2 was design, construction and maintenance of the building, structural plans, calculations and reconstructing the structural plans, test on materials and structural elements of the building, load test on parts of the building and finally the recommendation of remedial measures. Before the talk ended, Dr Tan shared with the audience some of his building audit case studies.



Figure 1: Dr Tan delivering the talk

At the end of the talk, there were questions raised by the audience which Dr Tan answered and clarified in more details. At the end of the event, the Session Chair invited the Chairman of CSETD, Dr Ng Ching Soon to present a token of appreciation to Dr Tan.



Figure 2: Presentation of memento by Dr Ng to Dr Tan