



Report on 'Diaphragm wall water proofing'

by Ir. Chong Chee Meng

Ir. Chong Chee Meng is currently the chairman in Civil and Structural Engineering Technical Division (CSETD).

The Civil and Structural Engineering Technical Division (CSETD) organized an evening talk on 'Diaphragm wall water proofing'. The talk was held on 31st October 2019 at Auditorium Tan Sri Prof Ching Fung Kee, Wisma IEM. The speaker was Mr. Haktan Sahin, who has more than 10 years experience in water proofing and water proofing repair. He started his career with Sika in 2008 and since 2018 he takes care for the global market development of Sika water proofing range of products.

This talk was chaired by Mr. Hew Choon Seng, committee member of CSETD and was attended by 77 participants. The 77 participants included engineers from engineering consultants, contracting firms, government agencies and local authorities as well as faculty members from local institutions of higher learning.

Mr. Haktan commenced his talk by explaining that diaphragm wall normally use in tight projects with existing buildings adjacent to the site, heavy civil engineering structures, deep basement (>15m), in poor soil conditions and high water level. The advantages of using diaphragm wall are maximize building space within site, good for top down construction, reduce water table draw down and reduce cost and construction time. He reiterated that for diaphragm wall without water proofing, leaking normally occur at diaphragm wall joints, construction joints, cracks and honeycombs. Water bar normally will be installed at the diaphragm wall joints to prevent water ingress.

Mr. Haktan also shared with the participants on the water proofing for the basement slab. There are 2 types of water proofing for basement slab i.e. compartmentalized system and fully bonded system. The type of water proofing use is depend on the project owner's requirement such as functionality, service life and total cost of ownership.



Presentation of memento by Ir. Chong to Mr. Haktan

At the end of the talk, there were questions raised by the audience which Mr. Haktan answered and clarified in more details. At the end of the event, the CSETD chairman, Ir. Chong presented a token of appreciation to Mr. Haktan.