

Summary of Decisions of the Structural Engineering Committee  
SEC 01/2011 held on 20.01.2011

(a) Case 01/2011

Issue: Three Trial Piles (TPBH-1, TPBH-2 and TPBH-3) of Steel H-pile grouted in prebored holes in CDG to take vertical load and lateral load

Recommendation: To accept the design principle of steel H-pile (Grade S450J0, 305x305x180 kg/m) grouted in prebored holes in CDG with pressurized grout to resist vertical load and lateral load, subject to the satisfactory verification by three trial piles.

Decision: Members endorsed the recommendation subject to the following conditions:-

1. A detailed quality assurance proposal on grouting works shall be submitted. It shall specify the measures adopted in controlling the grout pressure, volume and time.
2. For each grout mix, one sample of grout shall be provided from each 10 batches of grout, or every 10 m<sup>3</sup> from the amount of grout produced in a day, whichever is the smaller, to determine the crushing strength of the grout. Samples shall be provided not more than 1 hour after the grout has been mixed.
3. The possible total settlement and differential settlement of the building structures and their effects shall be evaluated and assessed.
4. Residual settlement at the head of the piles after removal of test loads shall not exceed the acceptance criterion specified in the Code of Practice for Foundations.