

Summary of Decisions of the Structural Engineering Committee
SEC Meeting 9/2021 held on 16.11.2021

Case 43/2021

Issue: Large diameter bored pile found on Meta-sedimentary rock

Recommendation: To accept the founding criteria for large diameter bored pile on Meta-sedimentary rock, which has a RMR value of not less than 50, minimum UCS value of 25MPa or minimum PLI_{50} value of 1MPa, minimum 90% of TCR and not less than 25% RQD

Decision: Having noted the background information, members endorsed the recommendations on a case-by-case basis subject to the following conditions:

- (i) The founding rock materials should satisfy the acceptance criteria as below:

		Value
Design Parameters	Allowable bearing Capacity	5 000 kPa
	Allowable Bond or Friction between Meta-sedimentary rock and Concrete	300 kPa (compression or transient tension)
		150 kPa (permanent tension)
Acceptance Criteria	Uniaxial Compressive Strength (UCS) Or Point Load Index Strength (PLI_{50})	Min. 25 MPa (UCS) Min. 1 MPa (PLI_{50})
	Total core recovery (TCR)	Min. 90%
	Rock Mass Rating (RMR)	Not less than 50
	Rock Quality Designation (RQD)	Not less than 25%

- (ii) Proof core-drilling, UCS or PLI_{50} test, evaluated RMR from individual predrill holes, sufficient quality supervision and pile load test should be provided. The result of proof test on trial piles and the review report on the RMR values based on predrill records should be found satisfactory.