

PARTIAL DRAINAGE DURING PRESSUREMETER TESTING

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In recent years, the pressuremeter in its many forms has become a highly respected instrument for the economical determination of geomechanical design parameters. It appears to have many advantages over the more traditional investigation methods of sampling and laboratory testing, which have led to its inter-

national acceptance and widespread use.

Despite many developments in the construction, installation and instrumentation of the pressuremeter, the interpretation of the results obtained still depends very heavily on a number of simplifying assumptions. One of the major assumptions used is the full drained/undrained conditions during a test. These conditions obviously depend on the generation and dissipation of pore water pressures. Therefore, the generation of pore pressure and rates of dissipation were investigated for different soil types. It was found that for the normal rates of testing, a soft saturated homogeneous clay can reasonably be assumed as being tested under undrained conditions while the assumption of drained conditions for a sand was reasonable. However, for many different soil conditions encountered in practice, the conditions of testing were found to be far from undrained and drained.

References

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