

**Estimation of Coefficient of Vertical Subgrade Reaction  
of Pile Based on Database of Load Test**

Hidetoshi NISHIOKA    Masahiro NISHIMURA  
Masayuki KODA        Masaru TATEYAMA

In order to introduce the performance based design of pile foundation, a vertical coefficient of subgrade reaction of pile, one of the important design factors, must be determined. The magnitude of the vertical coefficient of subgrade reaction of pile depends on not only the ground stiffness but also the construction method of pile. In the study reported in this paper, we performed a statistical investigation of the database of static axial compressive load test of actual piles constructed by various methods, and proposed an estimation formula of the vertical coefficient of subgrade reaction at pile end and pile shaft for each construction method.