USING ELEMENT TEST METHOD TO DETERMINE THE ACTIVE FAILURE DISPLACEMENT OF RETAINING WALL

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Abstract

While the retaining wall rotates, the horizontal stress of backfill will undergo changes from the states of at-rest to active. This study employs a triaxial test system for deriving the active failure displacement of retaining wall . First, the behaviors of lateral extension tests for saturated sand specimens are observed to find their active failure radial strains . Then, the value of corresponding to specified could be calculated with the geometric retaining wall - backfill system. Practically, the values of could be applied to served as a monitoring factor.

Keyword：Retaining wall, failure displacement, lateral extension, saturated sand.