## Spalling Prevention Method for Tunnel Lining Using Polyurea Resin

Kazuhide YASHIRO Keisuke SHIMAMOTO Sohei ITAYA Kaho KINOSHITA

This paper explains the applicability of polyurea resin as a spalling prevention method from tunnel lining. Model tests and trial executions have been carried out. According to the model tests using a model tunnel, with polyurea resin, spalling does not occur because the polyurea resin covers exfoliated concrete. According to the trial executions, the time required for spraying polyurea resin is shorter than that of the surface preparation or the primer coating. By the pull-off adhesion testing, it is confirmed that the adhesive strength of the polyurea resin is sufficient even after the experience of cold winter.