

## 10. The Promotion Neutralization Test of the Concrete Including the Chloride

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In this study, for the purpose of grasping the characteristic of complex deterioration on neutralization and salt damage, the promotion neutralization test of the concrete in which the salinity was mixed mixing and concrete in which the salinity was made to penetrate after the hardening was carried out. It was more abounding than the concrete which did not contain amount of carbon dioxide of the concrete including the chloride, and the neutralization also progressed early. And, amount of carbon dioxide also confirmed abounding the immobilization by the reaction with the silicic acid calcium than the quantity fixed in the concrete by calcium carbonate which the reaction with calcium hydroxide forms. In addition, concentration and segregation of the chloride that it diffused to the position that the chloride fixed in the concrete as a Friedel's salt becomes chloride ions in the neutralization region and that the concrete is deeper and permeates, and that it fixes chloride ions again were confirmed. An outlook to neutralization and modeling on complex deterioration of salt damage was obtained from these test result

**Key words :** salt damage, carbonation, Friedel salt, calcium hydroxide, carbon dioxide