

## 16. Study on the Prediction of Deterioration of Cracked R/C Structure -The Influence of the Crack on the Carbonation and Corrosion-

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In the trend towards performance specifications, an explicit performance indication will be required in terms of the durability of buildings, and there will be an ever increasing need for techniques for estimating the progress of building deterioration.

This study is intended to clarify the impact of cracks on carbonation and corrosion of reinforcements and to collect necessary information for predicting degradation of cracked reinforced concrete structures. Through the research, we obtained data on quantitative relationships between carbonation, cracking and cover thickness and corrosion of reinforcements. And, the corrosion prediction-type of reinforcements of the cracked zones was led.

**Key words** : carbonation, corrosion, cover concrete, reinforced concrete, crack