



CONFERENCE

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**FEATURED SPEAKER**

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**PERFORMANCE OF CEMENT DEEP MIXING METHOD IN 2011  
TOHOKU EARTHQUAKE**

Various kinds of civil engineering structures and facilities were seriously damaged in the earthquake in Tohoku and Kanto regions of Japan on 11 March 2011 due to the greatness of its magnitude. In contrast, many structures resisted the large seismic force having been reinforced by the CDM (Cement Deep Mixing) method, which is often used for increasing the bearing capacity of ground and improving seismic performance. This paper summarizes the field survey undertaken to investigate damage to structures and facilities reinforced by the CDM method. Several prefectures and metropolitan areas were selected for the survey, based on the occurrence of strong seismic motions. A total of 847 structures and facilities were studied, in the survey using a questionnaire, which mainly inquired about the appearance of structures and facilities. Of the respondents to the questionnaire, 789 replied that there were no seriously damaged structures. The paper presents the damaged and non-damaged sites of CDM-technique sites and non-CDM-techniques sites. It can be concluded from the field survey that the CDM Method demonstrates high efficacy and durability against a strong seismic motions.

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