Evaluation of Load-carried Capacity of the Post-installed Anchor and Its Design Method for Installment in Small Region

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The post-installed anchor has been recognized as widely a technology for civil engineering structures: e.g. reinforcements or reconstruction of concrete structures. The reliability of the post-installed anchor has decreased in recent years because of the serious accident in the road tunnel: collapse of the celling-boards caused by deterioration of the post-installed anchor. "Guidance for design and construction of the post-installed anchor" has been issued for the railway structures in 1987, 30 years ago. In this research, the design method for applying the post-installed anchor to concrete structures has been proposed by evaluating the basic information of mechanical performance of the post-installed anchor by conducting the experiment and the finite element method.