## Department of Civil Engineering



Testing of creep, shrinkage and cracking of concrete / Laboratory test for surface coating with a silane impregnation agent

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Keywords C

Creep, Shrinkage, Crack, Sustained load, Bond

Research Outline

## Testing of creep, shrinkage and cracking of concrete

Creep and shrinkage of concrete have been studied as ancient research themes. They influence the structural performance of concrete structures: for instance, crack occurrence of reinforced concrete, prestress loss of prestressed concrete, etc.

This study focuses on the time-dependent tensile characteristics of concrete. Original devices were developed.

## Laboratory test for surface coating with a silane impregnation agent

The surface coating method with a silane impregnation agent is one of the construction methods that improve durability of concrete structures. The water-repellent layer is made on the concrete surface.

This study develops a testing device that can measure the depth of a water-repellent layer with non-destructive.





