

Recommendation of Environmental Performance Verification for Concrete Structures (Draft)

Environmental problems are now being considered and recognized as the most important issues in our socioeconomic activities. This is because it is becoming more likely that the dramatic increase in resource and energy consumption in recent years. The Kyoto Protocol, in which the reduction of carbon dioxide and other greenhouse gases emission was determined, was adopted at COP3 in 1997 and came into effect in February 2005. Considering the fact that resources are consumed in large quantities and vast amounts of waste are discharged in construction industry, it is clear that such activities will not be carried out without regard to the global environment. There is no doubt that sustainable concrete structures must be realized in the future by appropriately incorporating environmental aspects into all operations.

Considering such a situation, Recommendation of Environmental Performance Verification for Concrete Structures (Draft) has been developed and published by JSCE. This recommendation is the first outcome as a guideline on how to incorporate environmental aspects into concrete structures. This recommendation is intended to extend the application of the performance verification concepts, which are currently utilized by the JSCE Standard Specifications for Concrete Structures, to the environment. The publication of this recommendation will serve as the start in the formation of a new frontier in concrete technology and contribute to the development of environmental impact reduction systems suitable for the environmental benefits that result from the construction of concrete structures.