SLOVENSKI STANDARD
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Okvir za specifikacijo za preprečevanje alkalno silikatne reakcije (ASR) v betonu

Framework for a specification on the avoidance of a damaging Alkali-Silica Reaction (ASR) in concrete

Rahmen für eine Spezifikation für die Vermeidung von Alkali-Siliciumdioxid-Reaktionen in Beton

Cadre d'une spécification destinée à prévenir les dommages causés au béton par l'alcali-réaction

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91.100.30	Beton in betonski izdelki	Concrete and concrete products

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This draft Technical Report is submitted to CEN members for Technical Committee Approval. It has been drawn up by the Technical Committee CEN/TC 104.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document (FprCEN/TR 16349:2011) has been prepared by Technical Committee CEN/TC 104 “Concrete and related products”, the secretariat of which is held by DIN.

This document is currently submitted to the Technical Committee Approval.

This Technical Report is partly based on the recommendation of RILEM TC ACS (Part 1 of AAR-7) [6].

Introduction

This Technical Report has been prepared by the Joint Working Group (JWG) on Alkali-Silica Reaction (ASR) that was set up by the chairmen of CEN/TC 51, CEN/TC 104 and CEN/TC 154 and composed of representatives from CEN/TC 51, CEN/TC 104, CEN/TC 154 and RILEM TC ACS.

List of members of the JWG on ASR:

Name	Represents
Michel Delort	CEN/TC 51
Christer Ljungkrantz	CEN/TC 51
Tom Harrison	CEN/TC 104
Christoph Müller	CEN/TC 104
Philip Nixon (until 2009)	CEN/TC 154
Robert Gossling (from 2010)	CEN/TC 154
Jean-Marc Vanbelle	CEN/TC 154
Terje F. Ronning	RILEM
Ingmar Borchers (VDZ)	Guest

In CEN member countries, ASR has been recognised as a problem in concrete structures since the 1970s. As a consequence, a number of countries established provisions to avoid damaging ASR. These provisions to avoid a damaging ASR are currently set out in national guidance and specification.

Provisions vary in the different CEN member countries and depend on local experiences; some member countries have not yet found the need to set up specification.

The JWG was established to review the situation and to see whether it is possible to go further in providing pragmatic and economic unified European specifications for the avoidance of a damaging ASR in concrete.

The JWG concluded that, unless there is any sound scientific explanation of damaging ASR which can be used uniformly all over Europe, it is premature to have harmonised classes for alkali-reactivity of aggregates and provisions for avoiding a damaging ASR on European level. Additionally, safety margins are determined at national level and are related to the reliability at which damaging ASR will not occur. Nevertheless a framework for the specification of the avoidance of a damaging ASR in concrete can be given.