PD CEN/TR 16443:2013



BSI Standards Publication

Backgrounds to the revision of EN 450-1:2005+A1:2007 — Fly ash for concrete



...making excellence a habit.™

National foreword

This Published Document is the UK implementation of CEN/TR 16443:2013.

The UK participation in its preparation was entrusted to Technical Committee B/517/4, Additions for concrete.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

The British Standards Institution 2013.

Published by BSI Standards Limited 2013

ISBN 978 0 580 78799 7

ICS 91.100.30

Compliance with a British Standard cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 April 2013.

Amendments issued since publication

Date Text affected

TECHNICAL REPORT RAPPORT TECHNIQUE TECHNISCHER BERICHT

CEN/TR 16443

March 2013

ICS 91.100.30

English Version

Backgrounds to the revision of EN 450-1:2005+A1:2007 - Fly ash for concrete

Contexte de la révision de l'EN 450-1:2005+A1:2007 -Cendres volantes pour béton Hintergründe zur Überarbeitung der EN 450-1:2005+A1:2007 - Flugasche für Beton

This Technical Report was approved by CEN on 29 October 2012. It has been drawn up by the Technical Committee CEN/TC 104.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2013 CEN

All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. CEN/TR 16443:2013: E

Cont	ents	Page
Forewo	ord	3
Introduction		4
1	Scope	5
2	List of relevant references	5
3 3.1 3.2	General	5
4	Overview of requirements in EN 450-1:2005+A1:2007 and EN 450-1:2012	6
5 5.1 5.2 5.3 5.4 5.5 5.6	Background for modification of the requirements in EN 450-1 Definition of fly ash	7 8 11 13 14
6	Background for the statistical evaluation for assessment procedure by variables	16
7 7.1 7.2	Background for modification of test methods in EN 450-1	18
8 8.1 8.2 8.3	Measures within EN 450-1 to assure fly ash quality	20 21
9 9.1 9.2 9.3	Impact of co-combustion on the release of regulated dangerous substances General Overruling regulation regarding toxicological and environmental aspects Environmental regulations (Leaching)	22 22
Annex	A (informative) List of abbreviations	25
Annex B.1 B.2	B (informative) Generation of fly ash The chain from fuel to fly ash, ready for use in concrete Ash formation during combustion	26
Annex	C (informative) Overview of tested fly ashes obtained from co-combustion	31
Annex D.1 D.2 D.3 D.4	D (informative) Calculated maximum co-combustion amounts	33 33 33
	raphy	

Foreword

This document (CEN/TR 16443:2013) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.