# **TECHNICAL REPORT RAPPORT TECHNIQUE TECHNISCHER BERICHT**

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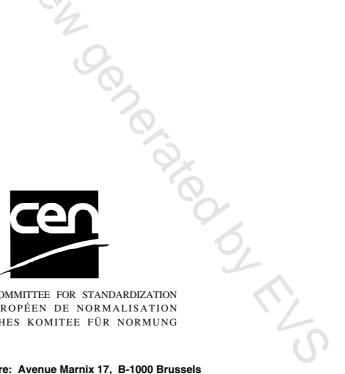
### Evaluation of conformity of fly ash for concrete - Guidelines for the application of EN 450-2

Evaluation de la conformité de cendres volantes pour le béton - Guide pour l'application de l'EN 450-2

Bewertung der Konformität von Flugasche für Beton -Leitlinien für die Anwendung von EN 450-2

This Technical Report was approved by CEN on 18 November 2008. It has been drawn up by the Technical Committee CEN/TC 104.

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<sup>1</sup> The numbering and headings of clauses follow those in EN 450-2:2005.

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### Foreword

This document (CEN/TR 15840:2009) has been prepared by Technical Committee CEN/TC 104 "Concrete and related products", the secretariat of which is held by DIN.

bility 3 shall. 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.

### Introduction

The purpose of this Guidelines Document is to provide explanatory detail on points not fully elaborated in EN 450-2:2005 "Fly ash for concrete – Part 2: Conformity evaluation". It is intended for use by producers and by certification bodies involved in the certification of fly ash following EN 450-1 and EN 450-2, in particular for the issuing of an EC Certificate of Conformity.

This document does not deal with the necessary internal procedures that the certification bodies will have.

It is an objective of this Guidelines Document that its use will assist in the establishment of equivalent procedures for certification of fly ash. It is expected that, following this document, traditional good procedures and practices that may be different can continue to be used, provided that they are not in contradiction with EN 450-1:2005 and EN 450-2. Such existing good procedures and practices, applied in conjunction with these Guidelines, are not considered to be an impediment to the achievement of the uniform level of certification throughout Europe, and by different certification bodies that is expected from the application of EN 450-2 together with these Guidelines.

This Guidelines Document is based on existing situations for production, evaluation of conformity and certification of fly ashes. It may happen that certification bodies be confronted by a situation different to those included in this document. In such a case, specific procedures should be elaborated on a case by case situation and be approved and fully recorded by the Certification Body. These specific procedures should always fulfil the requirements of EN 450-1:2005 and EN 450-2 and lead to the same level of confidence in product conformity that would be achieved by application of this Guidelines Document.

The clause numbering system of EN 450-2 is followed. The text of each of the clauses of the Standard is reproduced in full and is followed by guidance, which is provided only for those clauses where clarification or elaboration is needed.

### 1 Scope

This document specifies the scheme for the evaluation of conformity of fly ash according to EN 450-1:2005.

The document provides technical rules for the production control by the producer, including autocontrol testing of samples. It also provides rules for actions to be followed in the event of non-conformity, the procedure for the certification of conformity and requirements for dispatching centres.

#### Guidance

EN 450-2 deals with the evaluation of conformity of fly ash submitted for certification. It deals in particular with cases where "further testing" of the product is undertaken, as is the case for attestation system 1 + under the Construction Products Directive. The product for which EN 450-2 applies is defined in EN 450-1:2005 as fly ash for the production of concrete which consists of a fine powder of mainly spherical, glassy particles, derived from burning of pulverised coal, with or without co-combustion materials, which has pozzolanic properties.

### 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 196-1, Methods of testing cement — Part 1: Determination of strength

EN 196-7, Methods of testing cement — Part 7: Methods of taking and preparing samples of cement

EN 450-1:2005, Fly ash for concrete — Part 1: Definition, specifications and conformity criteria

EN 450-2:2005, Fly ash for concrete — Part 2: Conformity evaluation

EN 451-2, Method of testing fly ash — Part 2: Determination of fineness by wet sieving