

Method of testing fly ash —

Part 2: Determination of fineness by wet sieving

The European Standard EN 451-2:1994 has the status of a
British Standard

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Committees responsible for this British Standard

The preparation of this British Standard was entrusted by Technical Committee B/516, Cement and lime, to Subcommittee B/516/101, Pozzolanas, upon which the following bodies were represented:

- British Aggregate Construction Materials Industries
- British Cement Association
- British Precast Concrete Federation
- British Ready Mixed Concrete Association
- Cementitious Slag Makers' Association
- Department of the Environment (Building Research Establishment)
- Department of Transport
- Electricity Association
- Federation of Civil Engineering Contractors
- Quality Ash Association

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National foreword

This Part of BS EN 451 has been prepared by Subcommittee B/516/101 and is the English language version of EN 451-2:1994 *Method of testing fly ash —*

Part 2: Determination of fineness by wet sieving published by the European Committee for Standardization (CEN). This standard has been prepared as part of a package of standards harmonized within the member countries of CEN to support the essential requirements of the Construction Products Directive.

BS EN 451-2 describes a method for the determination of fineness of fly ash by wet sieving on a calibrated 0.045 mm (45 μ m) sieve as a reference procedure.

The method described in BS EN 451-2 is based on other internationally recognized standard methods for the determination of fly ash fineness, as is the method described in Annex D of BS 3892-1:1993.

The importance of checking (calibrating) each test sieve is essential to obtaining the correct results from this test method. While BS 3892-1 specifies that calibration be performed with standard reference powders, appropriate to the grade of ash to be tested, BS EN 451-2 has not made such a stipulation, except that the reference sample is to consist of rounded sand particles¹⁾.

While calibration or recalibration of each test sieve in both standards is made after 100 tests, BS 3892 requires also that test sieves are re-calibrated every 3 months, if this is sooner than the maximum of 100 tests permitted. There are also some minor differences between the two methods, e.g.

- a) the pressure of the water supply is specified as (80 ± 5) kPa in BS EN 451-2, while it is 70 kPa to 80 kPa in Annex D of BS 3892-1:1993;
- b) the mass of the sample to be tested is to be approximately 1.0 g in BS EN 451-2, while it is 1.0 g to 1.1 g in Annex D of BS 3892-1:1993;
- c) the determination of the sieve correction factor in BS EN 451-2 is not required to be repeated if the two determinations differ by more than 0.3 %, as is required by Annex D of BS 3892-1:1993.

With the exception of the constraint on the maximum of 3 months in use and the omission of specifying the origin of the calibration powder, any other minor differences are not considered sufficient to cause significant differences in the test results obtained by the two methods.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

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Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN title page, pages 2 to 6, an inside back cover and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

¹⁾ The source of supply of the reference material will be announced by the Secretariat of CEN/TC 104, DIN Deutsches Institut für Normung, Burggrafenstrasse 6, D-1000 Berlin 30, Germany.