

Methods of test for masonry —

Part 3: Determination of initial shear strength

The European Standard EN 1052-3:2002, incorporating amendment A1:2007, has the status of a British Standard

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National foreword

This British Standard is the UK implementation of EN 1052-3:2002, incorporating amendment A1:2007.

The start and finish of text introduced or altered by amendment is indicated in the text by tags **A1** **A1**. Tags indicating changes to CEN text carry the number of the CEN amendment. For example, text altered by CEN amendment A1 is indicated by **A1** **A1**.

The UK participation in its preparation was entrusted by Technical Committee B/519, Masonry and associated tests, to Subcommittee B/519/4, Tests.

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

EN 1052-3:2002 is a supporting standard to the “harmonized” European product standard specification EN 998-2, which fully takes into account the requirements of the European Commission mandate M116, *Masonry and related products*, given under the EU Construction Products Directive (89/106/EEC), and is intended to lead to CE marking.

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

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English version

Methods of test for masonry - Part 3: Determination of initial shear strength

Méthodes d'essai de la maçonnerie - Partie 3:
Détermination de la résistance initiale au cisaillement

Prüfverfahren für Mauerwerk - Teil 3: Bestimmung der
Anfangsscherfestigkeit (Haftscherfestigkeit)

This European Standard was approved by CEN on 11 April 2002.

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Foreword

This document EN 1052-3:2002 has been prepared by Technical Committee CEN/TC 125 "Masonry", the secretariat of which is held by BSI.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2003, and conflicting national standards shall be withdrawn at the latest by January 2003.

Annex A of this European Standard is informative.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Foreword to amendment A1

This document (EN 1052-3:2002/A1:2007) has been prepared by Technical Committee CEN/TC 125 "Masonry", the secretariat of which is held by BSI.

This Amendment to the European Standard EN 1052-3:2002 shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by September 2007, and conflicting national standards shall be withdrawn at the latest by September 2007.

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1 Scope

This European Standard specifies a method for determining the in plane initial shear strength of horizontal bed joints in masonry using a specimen tested in shear.

Guidance is given on the preparation of the specimens, the conditioning required before testing, the testing machine, the method of test, the method of calculation and the contents of the test report.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text, and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 772-1, *Methods of test for masonry units - Part 1: Determination of compressive strength.*

EN 772-10, *Methods of test for masonry units - Part 10: Determination of moisture content of calcium silicate and autoclaved aerated concrete units.*

EN 772-16, *Methods of test for masonry units - Part 16: Determination of dimensions.*

EN 998-2, *Specification for mortar for masonry - Part 2: Masonry mortar.*

EN 1015-3, *Methods of test for mortar for masonry - Part 3: Determination of consistence of fresh mortars (by flow table).*

EN 1015-7, *Methods of test for mortar for masonry - Part 7: Determination of air content of fresh mortar.*

EN 1015-11, *Methods of test for mortar for masonry - Part 11: Determination of flexural and compressive strength of hardened mortar.*

3 Principle

[A₁] The initial shear strength of masonry is derived from the strength of small masonry specimens tested to destruction. The specimens are tested in shear under four-point load.

Four different failure modes are considered to give valid results.

Two procedures, A and B are included. Procedure A involves testing specimens at different precompressions and the initial shear strength is defined by a linear regression curve to zero prestress. Procedure B involves testing specimens at zero precompression and determining a characteristic initial shear strength from a simple or a statistical consideration of the results. **[A₁]**