Methods of test for ancillary components for masonry - Part 9: Determination of flexural resistance and shear resistance of lintels

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NATIONAL FOREWORD

See Eesti standard EVS-EN 846-9:2016 sisaldab Euroopa standardi EN 846-9:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 846-9:2016 consists of the English text of the European standard EN 846-9:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 02.03.2016.	Date of Availability of the European standard is 02.03.2016.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

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Methods of test for ancillary components for masonry - Part 9: Determination of flexural resistance and shear resistance of lintels

Méthodes d'essai des composants accessoires de maçonnerie - Partie 9: Détermination de la résistance à la flexion et de la résistance au cisaillement des linteaux

Prüfverfahren für Ergänzungsbauteile für Mauerwerk - Teil 9: Bestimmung der Biege- und Schubwiderstandsfähigkeit von Stürzen

This European Standard was approved by CEN on 3 January 2016.

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

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Contents

Page

European foreword

This document (EN 846-9:2016) 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of an identical text or by endorsement, at the latest by September 2016, and conflicting national standards shall be withdrawn at the latest by December 2017.

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.

This document supersedes EN 846-9:2000.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

Provision has been made in this standard for the restraint of ‘L’ shape lintels against excessive torsion during testing.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: 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 the United Kingdom.

1 Scope

This European Standard specifies methods for determining the flexural and shear resistances and load deflection characteristics of single span, single or composite lintels used for supporting uniformly distributed loads over openings in masonry construction.

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 845-2, *Specification for ancillary components for masonry — Part 2: Lintels*

3 Principle

Specimen lintels are simply supported and subjected to vertically applied loads in order to determine flexural strength, shear resistance and deflection.

4 Symbols

B is the length of bearing, (mm)

D_c is the total height of a composite lintel over both tension and compression elements, (mm)

D_1 is the overall depth of a single or combined lintel

L_e is the effective length (or span), (mm)

t is the thickness of supported wall, (mm)

W is the applied load, (N)

5 Materials

5.1 Structural shell casing units

Structural shell casing units shall be in accordance with EN 845-2.

5.2 Composite lintels

Materials for the compressive elements of composite lintels shall be in accordance with manufacturer's specifications.

6 Apparatus

6.1 Test rig capable of withstanding the applied loads without any distress or distortion that could affect the results of the test.

6.2 Loading system accurate to within ± 2 %.

Where the load is to be applied using weights this should be without shock, and each increment in load and the failure load shall be measured to an accuracy of ± 2 %.

6.3 Deflection monitoring equipment accurate to within ± 2 %.