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Murverkstillbehör – Krav – Del 2: Avväxlingsbalkar

Specification for ancillary components for masonry – Part 2: Lintels

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Denna standard ersätter SS-EN 845-2:2013, utgåva 3.

The European Standard EN 845-2:2013+A1:2016 has the status of a Swedish Standard. This document contains the official English version of EN 845-2:2013+A1:2016.

This standard supersedes the Swedish Standard SS-EN 845-2:2013, edition 3.

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EUROPEAN STANDARD

EN 845-2:2013+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2016

ICS 91.080.30

Supersedes EN 845-2:2013

English Version

Specification for ancillary components for masonry - Part 2: Lintels

Spécifications pour composants accessoires de
maçonnerie - Partie 2: Linteaux

Festlegungen für Ergänzungsbauteile für Mauerwerk -
Teil 2: Stürze

This European Standard was approved by CEN on 21 March 2013 and includes Amendment 1 approved by CEN on 9 April 2016.

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

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European foreword

This document (EN 845-2:2013+A1:2016) 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of an identical text or by endorsement, at the latest by January 2017, and conflicting national standards shall be withdrawn at the latest by April 2018.

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 includes Amendment 1 approved by CEN on 2016-04-09.

This document supersedes A1 EN 845-2:2013 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

A1 *deleted text* A1

EN 845, *Specification for ancillary components for masonry*, consists of the following parts:

- *Part 1: Wall ties, tension straps, hangers and brackets*
- *Part 2: Lintels*
- *Part 3: Bed joint reinforcement of steel meshwork*

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 requirements for prefabricated lintels for maximum spans of 4,5 m and made from steel, autoclaved aerated concrete, manufactured stone, concrete, fired clay units, calcium silicate units, natural stone units, or a combination of these materials. Concrete and steel beams conforming to EN 1090-1, EN 12602 and EN 13225, as appropriate, are not covered by this standard.

Prefabricated lintels can be either complete lintels or the prefabricated part of a composite lintel.

This European Standard is not applicable to:

- a) lintels completely made on site;
- b) lintels of which the tensile parts are made on site;
- c) timber lintels;
- d) natural stone lintels, not reinforced.

Linear components spanning clear openings greater than 4,5 m in masonry walls and linear components intended for use independently in a structural role (e.g. beams) are not covered by this standard.

2 Normative references

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

EN 206-1:2000, *Concrete — Part 1: Specification, performance, production and conformity*

EN 771 (all parts), *Specification for masonry units*

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

EN 772-11, *Methods of test for masonry units — Part 11: Determination of water absorption of aggregate concrete, autoclaved aerated concrete, manufactured stone and natural stone masonry units due to capillary action and the initial rate of water absorption of clay masonry units*

EN 846-9, *Methods of test for ancillary components for masonry — Part 9: Determination of flexural resistance and shear resistance of lintels*

EN 846-11, *Methods of test for ancillary components for masonry — Part 11: Determination of dimensions and bow of lintels*

EN 846-13:2001, *Methods of test for ancillary components for masonry — Part 13: Determination of resistance to impact, abrasion and corrosion of organic coatings*

EN 846-14, *Methods of test for ancillary components for masonry — Part 14: Determination of the initial shear strength between the prefabricated part of a composite lintel and the masonry above it*

EN 990, *Test methods for verification of corrosion protection of reinforcement in autoclaved aerated concrete and lightweight aggregate concrete with open structure*

EN 998-2:2010, *Specification for mortar for masonry — Part 2: Masonry mortar*

EN 1745, *Masonry and masonry products — Methods for determining thermal properties*

EN 10080, *Steel for the reinforcement of concrete — Weldable reinforcing steel — General*

EN 10088 (all parts), *Stainless steels*

prEN 10138 (all parts), *Prestressing steels*

EN 10346:2009, *Continuously hot-dip coated steel flat products — Technical delivery conditions*

EN 12602:2008, *Prefabricated reinforced components of autoclaved aerated concrete*

EN 13501-2, *Fire classification of construction products and building elements — Part 2: Classification using data from fire resistance tests, excluding ventilation services*

EN ISO 1461, *Hot dip galvanized coatings on fabricated iron and steel articles — Specifications and test methods (ISO 1461)*

EN ISO 1463, *Metallic and oxide coatings — Measurement of coating thickness — Microscopical method (ISO 1463)*

3 Terms, definitions and symbols

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

NOTE 1 Examples of lintel types are shown in Figures 1 to 3. The figures are only for illustration of lintel types. Other details such as bearings, thermal insulation systems and damp proof courses are not shown.

NOTE 2 General dimensions defined in Clause 3 are illustrated in Figures 3 and 4.

3.1.1

autoclaved aerated concrete lintel

lintel manufactured using reinforced autoclaved aerated concrete

3.1.2

bearing length

length of the end of a lintel which bears on its support

3.1.3

built-in length

minimum length needed to anchor the reinforcing bars

3.1.4

clear opening

clear distance between lintel supports

3.1.5

combined lintel

lintel consisting of two or more structural elements each one acting with compression and tension zones

3.1.6

composite lintel

lintel comprising a prefabricated part and a complementary element of in-situ masonry or concrete above, acting together

3.1.7

composite lintel height

overall height of the tension and compression zones of a composite lintel

3.1.8

concrete lintel

lintel manufactured using reinforced or prestressed concrete

3.1.9

declared value

value for a product property, determined in accordance with this standard, that a manufacturer is confident of achieving, bearing in mind the variability of the manufacturing process

3.1.10

effective span

distance between the centres of the bearing of a lintel, or the clear opening spanned by the lintel plus the overall height of the lintel including any complementary element, whichever is the lesser

3.1.11

flexural resistance

mean uniformly distributed load at which failure of a sample of lintel specimens occurs (or a lower load at which tests are stopped in accordance with the recommendations of the manufacturer of the lintel)

3.1.12

lintel

lineal element supporting load over an opening in a masonry wall

3.1.13

lintel height

overall height of the prefabricated part of a lintel

3.1.14

lintel length

overall length of the prefabricated lintel

3.1.15

load bearing capacity

mean value for a sample of lintels of the total of the uniformly distributed load at failure or at an extreme deflection, whichever is the lesser