



SLOVENSKI STANDARD

kSIST FprEN 845-3:2012

01-december-2012

Specifikacija za dodatne komponente zidovja - 3. del: Jeklene mreže za armiranje naležnih reg

Specification for ancillary components for masonry - Part 3: Bed joint reinforcement of steel meshwork

Festlegungen für Ergänzungsbauteile für Mauerwerk - Teil 3: Lagerfugenbewehrung aus Stahl

Spécifications pour composants accessoires de maçonnerie - Partie 3 : Treillis d'armature en acier pour joints horizontaux

Ta slovenski standard je istoveten z: FprEN 845-3

ICS:

91.060.10	Stene. Predelne stene. Fasade	Walls. Partitions. Facades
-----------	----------------------------------	----------------------------

91.080.30	Zidane konstrukcije	Masonry
-----------	---------------------	---------

kSIST FprEN 845-3:2012

en,fr,de

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

FINAL DRAFT
FprEN 845-3

September 2012

ICS 91.080.30

Will supersede EN 845-3:2003+A1:2008

English Version

Specification for ancillary components for masonry - Part 3: Bed joint reinforcement of steel meshwork

Spécifications pour composants accessoires de
maçonnerie - Partie 3 : Treillis d'armature en acier pour
joints horizontaux

Festlegungen für Ergänzungsbauteile für Mauerwerk - Teil
3: Lagerfugenbewehrung aus Stahl

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/TC 125.

If this draft becomes a European Standard, CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

This draft European Standard was established by CEN in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.

Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	4
1 Scope.....	5
2 Normative references	5
3 Terms, definitions and symbols	6
3.1 Terms and definitions.....	6
3.2 Symbols	7
4 Materials and types of products.....	8
4.1 Materials.....	8
4.2 Types of products	11
4.2.1 General.....	11
4.2.2 Welded wire meshwork	11
4.2.3 Woven wire meshwork	11
4.2.4 Expanded metal meshwork.....	12
5 Requirements	12
5.1 General.....	12
5.2 Product applications and types.....	13
5.2.1 Products for structural use.....	13
5.2.2 Products for non-structural use	13
5.3 Dimensions and limit deviations	13
5.3.1 General.....	13
5.3.2 Determination of wire size.....	14
5.3.3 Determination of cross-sectional area.....	15
5.3.4 Determination of other dimensions	15
5.4 Mechanical strength	15
5.4.1 Mechanical strength of bed joint reinforcement for structural applications	15
5.4.2 Mechanical strength of bed joint reinforcement for non-structural applications	16
5.5 Bond strength and anchorage length.....	16
5.6 Durability.....	16
5.7 Dangerous substances.....	17
6 Description and designation.....	17
7 Marking	18
8 Evaluation of conformity.....	18
8.1 General.....	18
8.2 Initial type tests	18
8.3 Factory production control	19
8.3.1 General.....	19
8.3.2 Testing and measuring equipment	19
8.3.3 Production equipment	19
8.3.4 Raw materials	19
8.3.5 Production process	19
8.3.6 Finished product testing	20
8.3.7 Statistical techniques	20
8.3.8 Marking and stock control of products	20
8.3.9 Traceability	20
8.3.10 Nonconforming products.....	20
8.4 Sampling for initial type testing and independent testing of consignments.....	20
Annex A (informative) Guidance on FPC frequencies	22

Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive	24
ZA.2.1 Systems of attestation.....	25
ZA.2.2 Declaration of conformity.....	26
Bibliography	29

Foreword

This document (FprEN 845-3:2012) has been prepared by Technical Committee CEN/TC 125 "Masonry", the secretariat of which is held by BSI.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 845-3:2003+A1:2008.

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.

This part has been modified to take into account the comments made in the five-year review on the 2003 version. In view of their widespread use, austenitic stainless steel has been added to the materials that may be used.

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.*

1 Scope

This European Standard specifies the requirements for masonry bed joint reinforcement for structural use (see 5.2.1) and for non-structural use (see 5.2.2).

Where products are intended for use in cavity wall construction, this European Standard covers only the performance of the meshwork as reinforcement in bed joints and not its performance as wall ties across the cavity.

This European Standard is not applicable to:

- a) products in the form of individual bars or rods;
- b) products formed from materials other than specified grades of austenitic stainless steel, austenitic ferritic stainless steel, zinc pre-coated steel sheet or zinc coated steel wire with or without organic coating.

NOTE Annex ZA refers only to welded wire meshwork intended for structural use referred to in 5.2.1 as there are no known regulated requirements for products of this family for non structural use.

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 846-2, *Methods of test for ancillary components for masonry — Part 2: Determination of bond strength of prefabricated bed joint reinforcement in mortar joints*

EN 846-3, *Methods of test for ancillary components for masonry — Part 3: Determination of shear load capacity of welds in prefabricated bed joint reinforcement*

EN 10020, *Definitions and classification of grades of steel*

EN 10088 (all parts), *Stainless steels*

EN 10143, *Continuously hot-dip coated steel sheet and strip — Tolerances on dimensions and shape*

EN 10244 (all parts), *Steel wire and wire products — Non-ferrous metallic coatings on steel wire*

EN 10245-1, *Steel wire and wire products — Organic coatings on steel wire — Part 1: General rules*

EN 10245-2, *Steel wire and wire products — Organic coatings on steel wire — Part 2: PVC finished wire*

EN 10245-3, *Steel wire and wire products — Organic coatings on steel wire — Part 3: PE coated wire*

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

EN ISO 15630 (all parts), *Steel for the reinforcement and prestressing of concrete — Test methods*

FprEN 845-3:2012 (E)**3 Terms, definitions and symbols****3.1 Terms and definitions**

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

3.1.1**bed joint**

mortar layer between the bed faces of masonry units

3.1.2**bed joint reinforcement**

steel reinforcement that is prefabricated for building into a bed joint

3.1.3**bond strength**

tensile load that can be resisted by a specified length of reinforcement in a masonry bed joint

3.1.4**characteristic yield strength**

value of the yield strength above which 95 % of all the individual test results occur

3.1.5**cross-wires**

wires which connect longitudinal wires

3.1.6**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

3.1.7**element**

complete length of bed joint reinforcement either in straight cut lengths or in a roll

3.1.8**anchorage length**

minimum embedment of a length of bed joint reinforcement in mortar in order to achieve the full effectiveness of the reinforcement

3.1.9**longitudinal wire**

wire placed parallel to the length of the masonry

3.1.10**meshwork**

network created with welded or woven wires or as a result of expanding a strip with a series of parallel slits

3.1.11**profile height**

maximum overall height (distance between the upper and lower surfaces at right angles to the length and width of the joint) of the embedded portion of the bed joint reinforcement

3.1.12**shear load capacity**

mean value for sample of product specimens of the failure loads at the junction between two wires loaded in the direction of the longitudinal axis in the plane of the bed joint reinforcement