# MÜÜRITARVIKUTE SPETSIFIKATSIOON. OSA 3: SÄNGITUSVUUGI TERASSARRUSVÕRGUD

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



### EESTI STANDARDI EESSÕNA

### NATIONAL FOREWORD

See Eesti standard EVS-EN 845-3:2013+A1:2016 sisaldab Euroopa standardi EN 845-3:2013+A1:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 845-3:2013+A1:2016 consists of the English text of the European standard EN 845-3:2013+A1:2016.
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 27.07.2016.	Date of Availability of the European standard is 27.07.2016.
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 <u>standardiosakond@evs.ee</u>.

### ICS 91.080.30

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Aru 10, 10317 Tallinn, Eesti; koduleht <u>www.evs.ee</u>; telefon 605 5050; e-post <u>info@evs.ee</u>

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Aru 10, 10317 Tallinn, Estonia; homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

## EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 845-3:2013+A1

July 2016

ICS 91.080.30

Supersedes EN 845-3:2013

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

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. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists 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.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

### **Contents** Page

Europ	uropean foreword	
1	Scope	5
2	Normative references	5
3	Terms, definitions and symbols	
3.1	Terms and definitions	
3.2	Symbols	7
4	Materials and types of products	8
4.1	Materials	
4.2	Types of products	
4.2.1	General	
4.2.2	Welded wire meshwork	
4.2.3	Woven wire meshwork	
4.2.4	Expanded metal meshwork	12
5	Requirements	12
5.1	General	
5.2	Product applications and types	13
5.2.1	Products for structural use	
5.2.2	Products for non-structural use	
5.3	Dimensions and limit deviations	
5.3.1	General	
5.3.2	Determination of wire size	
5.3.3	Determination of cross-sectional area	
5.3.4	Determination of other dimensions	
5.4	Mechanical strength	
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	10 1 <i>6</i>
5.6	Durability	
5.7	Dangerous substances	
_	Description and designation	
6	Description and designation	17
7	Marking	17
8	Assessment and verification of constancy of performance - AVCP	18
8.1	General	
8.2	Type testing	18
8.2.1	General	18
8.2.2	Test samples, testing and compliance criteria	
8.2.3	Test reports	
8.2.4	Shared other party results	
8.3	Factory production control (FPC)	
8.3.1	General	
8.3.2	Requirements	20

8.3.3 8.3.4	Product specific requirementsProcedure for modifications	
	A (informative) Guidance on FPC frequencies	
	nex ZA 🔄 (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation	
ZA.1	Scope and relevant characteristics	26
<b>ZA.2</b>	System of Assessment and Verification of Constancy of Performance (AVCP)	27
<b>ZA.3</b>	Assignment of AVCP tasks	
Biblio	graphy	28
	graphy. China and the state of	

### **European foreword**

This document (EN 845-3:2013+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 A EN 845-3:2013 A.

The start and finish of text introduced or altered by amendment is indicated in the text by tags  $A_1 \land A_1$ .

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.

#### $A_1$ deleted text $A_1$

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 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, Definition 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