

Specification for ancillary components for masonry —

Part 3: Bed joint reinforcement of steel meshwork

The European Standard EN 845-3:2001 has the status of a
British Standard

ICS 91.080.30

National foreword

This British Standard is the official English language version of EN 845-3:2001.

This edition of EN 845-3, which is an “ordinary” European Standard, will be superseded in due course by a “harmonized” European Standard EN 845-3 which fully takes into account the requirements of the European Commission mandate M116 “Masonry and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 intended to lead to CE marking.

EN 845-3 is the subject of transitional arrangements agreed under the Commission mandate. The Member States have agreed a nominal transition period for the co-existence of the future “harmonized” European Standard EN 845-3 and their corresponding national standard(s). It is intended that this period will comprise a nominal nine month period during which any required changes to national regulations are to be made, followed by a further nominal twelve month period for the implementation of CE marking. At the end of this co-existence period, the national standard(s) will be withdrawn. There are no existing British Standards to be superseded.

The UK participation in its preparation was entrusted by Technical Committee B/519, Masonry and associated testing, to Subcommittee B/519/3, Ancillary components for masonry, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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

Cross-references

The British Standards which implement international or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled “International Standards Correspondence Index”, or by using the “Find” facility of the BSI Standards Electronic Catalogue.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

This British Standard, having been prepared under the direction of the Sector Committee for Building and Civil Engineering, was published under the authority of the Standards Committee and comes into effect on 15 August 2001

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 18, an inside back cover and a back cover.

The BSI copyright date displayed in this document indicates when the document was last issued.

Amendments issued since publication

Amd. No.	Date	Comments

© BSI 07-2001

ISBN 0 580 37767 9

English version

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

Spécification 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 5 August 2000.

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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 Management Centre has the same status as the official versions.

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Foreword

This European Standard 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 October 2001, and conflicting national standards shall be withdrawn at the latest by December 2001.

This European Standard 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).

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, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the requirements for welded wire meshwork, woven wire meshwork and expanded metal meshwork for use as reinforcement in bed joints of masonry.

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.

The following are not covered by this standard:

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

2 Normative reference

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.

EN 846-2	<i>Methods of test for ancillary components for masonry — Part 2: Determination of bond strength of bed joint reinforcement in mortar joints.</i>
EN 846-3	<i>Methods of test for ancillary components for masonry — Part 3: Determination of shear strength of welds of bed joint reinforcement.</i>
EN 10002	<i>Metallic materials; tensile testing — Part 1: Method of test; Part 2: Verification of the force measuring system of the tensile testing machines; Part 4: Verification of extensometers used in uniaxial testing.</i>
EN 10020	<i>Definitions and classification of grades of steel.</i>
EN 10088	<i>Stainless steels.</i>
EN 10142	<i>Continuously hot-dip zinc coated low carbon steel sheet and strip for cold forming — Technical delivery conditions.</i>
EN 10147	<i>Continuously hot-dip zinc coated unalloyed structural steel sheet and strip — Technical delivery conditions.</i>
EN 10214	<i>Continuously hot-dip zinc-aluminium (ZA) coated steel strip and sheet — Technical delivery conditions.</i>
EN 10244	<i>Steel wire and wire products-Non-ferrous metallic coatings on steel wire — Part 1: General principle; Part 2: Zinc and zinc alloy coatings on steel wire.</i>
EN 10245	<i>Steel wire and wire products — Organic coatings on wire.</i>

3 Definitions and symbols

3.1 Definitions

For the purpose of this Standard, the following 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: The 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 in order to maintain their spacing.

3.1.6 declared value: Value for a product, 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 designed application: Application based on calculations according to accepted structural design methods.

3.1.8 element: Complete length of bed joint reinforcement either in straight cut lengths or in a roll.

3.1.9 lap length: Minimum length of a piece of bed joint reinforcement running in parallel with the next piece in order to maintain the full effectiveness of the reinforcement in the masonry bed joint.

3.1.10 longitudinal wire: Wire placed parallel to the length of the masonry.

3.1.11 meshwork: Network created with welded or woven wires or as a result of expanding a strip with a series of parallel slits.

3.1.12 non designed application: Application not based on calculations to accepted structural design methods, but on accepted rules.

3.1.13 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.

3.1.14 width: Overall dimension in the plane of the bed joint reinforcement measured perpendicular to the longitudinal axis.

3.1.15 wire: Longitudinal cold drawn metal of any cross-sectional shape.

3.1.16 wire size: Diameter in millimetres of a circle with an area equal to the cross sectional area of the wire.