

**Methods of test for ancillary
components for masonry - Part 7:
Determination of shear load capacity
and load displacement characteristics
of shear ties and slip ties (couplet test
for mortar joint connections)**

Methods of test for ancillary components for
masonry - Part 7: Determination of shear load
capacity and load displacement characteristics of
shear ties and slip ties (couplet test for mortar joint
connections)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 846-7:2000 sisaldab Euroopa standardi EN 846-7:2000 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 08.08.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 846-7:2000 consists of the English text of the European standard EN 846-7:2000.</p> <p>This document is endorsed on 08.08.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This Standard specifies the couplet method for determining the shear load resistance and stiffness of ties embedded in mortar joints. The test is intended for ties for connecting together two leaves of masonry forming a collar jointed wall or two walls at right angles. It also applies to ties used for connecting the edges of infill panel walls to frames which encircle them.</p>	<p>Scope:</p> <p>This Standard specifies the couplet method for determining the shear load resistance and stiffness of ties embedded in mortar joints. The test is intended for ties for connecting together two leaves of masonry forming a collar jointed wall or two walls at right angles. It also applies to ties used for connecting the edges of infill panel walls to frames which encircle them.</p>
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ICS 91.060.10, 91.080.30

Võtmesõnad:

English version

Methods of test for ancillary components for masonry

Part 7: Determination of shear load capacity and load displacement characteristics of shear ties and slip ties (couplet test for mortar joint connections)

Méthodes d'essai des composants accessoires de maçonnerie – Partie 7: Détermination de la résistance au cisaillement et des caractéristiques effort-déformation des attaches résistant au cisaillement et des attaches de glissement (essai dans un joint de mortier entre deux éléments)

Prüfverfahren für Ergänzungsbauteile für Mauerwerk – Teil 7: Bestimmung der Schubtragfähigkeit und der Steifigkeit von Mauerverbindern (Steinpaar-Prüfung in Mörtelfugen)

This European Standard was approved by CEN on 1999-12-04.

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

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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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 August 2000, and conflicting national standards shall be withdrawn at the latest by September 2000.

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.

This European standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association and supports the essential requirements of the EU Construction Products Directive (89/106/EEC) and includes the performance requirements referred to in the Eurocode for masonry Structures.

1 Scope

This European Standard specifies the couplet method for determining the horizontal and vertical shear load resistance and load-deflection behaviour of shear ties and slip ties embedded in mortar joints. The test is intended for ties for connecting together two leaves of masonry forming a collar jointed wall or two walls at right angles. It also applies to ties used for connecting the edges of infill panel walls to frames which encircle them.

2 Normative references

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.

prEN 771-1	Specification for masonry units - Part 1 : Clay masonry units
prEN 771-2	Specification for masonry units - Part 2 : Calcium silicate masonry units
prEN 771-3	Specification for masonry units - Part 3 : Aggregate concrete masonry units (dense and lightweight aggregates)
prEN 771-4	Specification for masonry units - Part 4 : Autoclaved aerated concrete masonry units
prEN 771-5	Specification for masonry units - Part 5 : Manufactured stone masonry units
prEN 771-6	Specification for masonry units - Part 6 : Natural stone masonry units
prEN 772-1	Methods of test for masonry units - Part 1 : Determination of compressive strength
EN 772-10	Methods of test for masonry units - Part 10 : Determination of moisture content of calcium silicate, and autoclaved aerated concrete masonry units
prEN 845-1	Specification for ancillary components for masonry - Part 1 : Ties, straps, hangers, brackets and support angles
prEN 998-2	Specification for mortar for masonry - Part 2 : Masonry mortar
EN 1015-3	Methods of test for mortar for masonry - Part 3 : Determination of consistence of fresh mortar by flow table
EN 1015-7	Methods of test for mortar for masonry - Part 7 : Determination of air content of fresh mortar
prEN 1015-11	Methods of test for mortar for masonry - Part 11 : Determination of flexural and compressive strength of hardened mortar

3 Principle

One end of the tie is embedded in a mortar joint, typical of the type for which the tie is specified, between a pair (couplet) of typical masonry units. The tie is then clamped at its free end and subjected to shear against a reactive support for the couplet. Slip ties may be tested by the same method.

NOTE: The method measures the capacity of the tie alone and does not measure the contribution to the total shear resistance given by two masonry faces separated by a vertical mortar joint. This value should be obtained by wallette tests if required.