

**Ehituses kasutatavad soojustusmaterjalid.  
Täisnurksuse hindamine**

Thermal insulating products for building applications  
- Determination of squareness

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 824:1999 sisaldab Euroopa standardi EN 824:1994 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 824:1999 consists of the English text of the European standard EN 824:1994.</p> <p>This document is endorsed on 23.11.1999 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><b>Käsitlusala:</b> See standard määrab kindlaks seadmed ja moodused täissuuruses toodete pikkus-, laius- ja/või paksusmõõtmest kõrvalekalde määramiseks. Standard kehtib soojustustoodete kohta. Meetodit saab tavaliselt kohaldada sirgete servadega toodetele. Teistsuguse kujuga toodete, näiteks profileeritud servadega toodete korral võib meetodit vastavalt kohandada.</p>	<p><b>Scope:</b></p>
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**Võtmesõnad:** hooned, mõõtmine, servamine, soojaisolatsioon, soojustusmaterjalid

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Descriptors: Thermal insulating material, building construction, squareness, testing.

**English version**

**Thermal insulating products for building applications  
Determination of squareness**

Produits isolants thermiques destinés aux applications du bâtiment; détermination de l'équerrage

Wärmedämmstoffe für das Bauwesen; Bestimmung der Rechtwinkligkeit

This European Standard was approved by CEN on 1994-07-22.

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 Central Secretariat 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

**CEN**

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

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

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## Foreword

This European Standard has been prepared by CEN/TC 88 "Thermal Insulating Materials and Products", the secretariat of which is held by DIN.

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 1995, and conflicting national standards shall be withdrawn at the latest by December 1996.

This European Standard is one of a series of standards which specify test methods for determining dimensions and properties of thermal insulating materials and products. It supports a series of products standards for thermal insulating materials and products which derive from the Council Directive of 21 December 1988 on the approximation of laws, regulations and administrative provisions of the Member States relating to construction products (Directive 89/106/EEC) through the consideration of the essential requirements.

This European Standard has been drafted for applications in buildings but it may also be used in other areas where it is relevant.

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

In pursuance of Resolution BT 20/1993 Revised, CEN/TC 88 has proposed defining the standards listed below as a European "package" of standards, setting December 31, 1996 as the date of withdrawal (dow) of national standards which conflicts with the European Standards of this package.

The "package" of standards comprises the following group of inter-related standards on test methods for determining dimensions and properties of thermal insulation materials and products, all of which come within the scope of CEN/TC 88 :

- |          |  |
|----------|--|
| EN 822   | Thermal insulating products for building application -<br>Determination of length and width  |
| EN 823   | Thermal insulating products for building application -<br>Determination of thickness   |
| EN 824   | Thermal insulating products for building application -<br>Determination of squareness  |
| EN 825   | Thermal insulating products for building application -<br>Determination of flatness  |
| prEN 826 | Thermal insulating products for building application -<br>Determination of compression behaviour   |
|          | Thermal insulating products for building application -<br>Determination of the apparent density <sup>1)</sup>  |
|          | Thermal insulating products for building application -<br>Determination of dimension and shape stability under constant normal laboratory<br>conditions (23°C/50% relative humidity) <sup>1)</sup> |

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<sup>1)</sup> Standards are in preparation.

**Thermal insulating products for building application -  
Determination of dimensional stability under specified temperature and humidity  
conditions <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of deformation under specified compressive load and temperature  
conditions <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of compressive creep <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of tensile strength perpendicular to faces <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of tensile strength parallel to faces <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of short term water absorption by partial immersion <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of linear dimensions of test specimens <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of water vapour transmission properties <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of long term water absorption by immersion <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of long term water absorption by diffusion <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of bending behaviour <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of shear behaviour <sup>1)</sup>**

**Thermal insulating products for building application -  
Determination of freeze-thaw resistance <sup>1)</sup>**

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard : Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, United Kingdom.

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<sup>1)</sup> Standards are in preparations.

## 1 Scope

This European Standard specifies the equipment and procedure for determining the deviation from squareness for length, width and/or thickness of full-size products. It is applicable to thermal insulating products. The method is normally applicable to products with straight edges. For products of other shape, e.g. profiled edges, the method can be adapted accordingly.

## 2 Normative references

This European Standard contains no normative references.

## 3 Definition

For the purposes of this standard, the following definition applies :

**deviation from squareness** : The distance from one limb of a perfect square (see figure 1, 2 and 3) to the edge of the product at a given distance from a corner.

## 4 Principle

Apply a metal square to the product edges and measure the deviation between one limb of the metal square and the products edge (see figure 1).

## 5 Apparatus

5.1 A flat surface;

5.2 Metal rule or metal tape graduate in millimetres and permitting reading to 0,5 mm;

5.3 A metal square with limbs at least 500 mm long with a deviation from squareness of not more than  $\pm 0,1$  mm when measured at 500 mm from the corner.

**NOTE** : Any test equipment which provides the same result with at least the same accuracy may be used.

## 6 Test specimens

### 6.1 Dimensions of test specimens

The test specimens shall be the full-size product.

### 6.2 Number of test specimens

The number of test specimens shall be as specified in the relevant product standard.

**NOTE** : In the absence of a product standard the number of test specimens may be agreed between parties.

### 6.3 Conditioning of test specimens

The test specimens should be stored for a least 6 h at  $(23 \pm 5)^\circ\text{C}$ . In case of dispute they shall be stored at  $(23 \pm 2)^\circ\text{C}$  and  $(50 \pm 5)\%$  relative humidity for the time specified in the relevant product standard.