

SLOVENSKI STANDARD kSIST FprEN 12085:2012

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Toplotnoizolacijski proizvodi za uporabo v gradbeništvu - Ugotavljanje linearnih dimenzij preskušancev

Thermal insulating products for building applications - Determination of linear dimensions of test specimens

Wärmedämmstoffe für das Bauwesen - Bestimmung der linearen Maße von Probekörpern

Produits isolants thermiques destinés aux applications du bâtiment - Détermination des dimensions linéaires des éprouvettes d'essai

Ta slovenski standard je istoveten z: FprEN 12085

ICS:

91.100.60 Materiali za toplotno in

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Thermal and sound insulating

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English Version

Thermal insulating products for building applications - Determination of linear dimensions of test specimens

Produits isolants thermiques destinés aux applications du bâtiment - Détermination des dimensions linéaires des éprouvettes d'essai Wärmedämmstoffe für das Bauwesen - Bestimmung der linearen Maße von Probekörpern

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

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Foreword

This document (FprEN 12085:2012) has been prepared by Technical Committee CEN/TC 88 "Thermal insulating materials and products", the secretariat of which is held by DIN.

This document is currently submitted to the Unique Acceptance Procedure.

This document will supersede EN 12085:1997.

The revision of this standard contains no major changes only minor corrections and clarifications of editorial nature.

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 product 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 EN test standard is one of 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 applications Determination of length and width
- EN 823, Thermal insulating products for building applications Determination of thickness
- EN 824, Thermal insulating products for building applications Determination of squareness
- EN 825, Thermal insulating products for building applications Determination of flatness
- EN 826, Thermal insulating products for building applications Determination of compression behaviour
- EN 1602, Thermal insulating products for building applications Determination of the apparent density
- EN 1603, Thermal insulating products for building applications Determination of dimensional stability under constant normal laboratory conditions (23 °C/50 % relative humidity)
- EN 1604, Thermal insulating products for building applications Determination of dimensional stability under specified temperature and humidity conditions
- EN 1605, Thermal insulating products for building applications Determination of deformation under specified compressive load and temperature conditions
- EN 1606, Thermal insulating products for building applications Determination of compressive creep
- EN 1607, Thermal insulating products for building applications Determination of tensile strength perpendicular to faces
- EN 1608, Thermal insulating products for building applications Determination of tensile strength parallel to faces

EN 1609, Thermal insulating products for building applications — Determination of short term water absorption by partial immersion

EN 12085, Thermal insulating products for building applications — Determination of linear dimensions of test specimens

EN 12086, Thermal insulating products for building applications — Determination of water vapour transmission properties

EN 12087, Thermal insulating products for building applications — Determination of long term water absorption by immersion

EN 12088, Thermal insulating products for building applications — Determination of long term water absorption by diffusion

EN 12089, Thermal insulating products for building applications — Determination of bending behaviour

EN 12090, Thermal insulating products for building applications — Determination of shear behaviour

EN 12091, Thermal insulating products for building applications — Determination of freeze-thaw resistance

EN 12429, Thermal insulating products for building applications — Conditioning to moisture equilibrium under specified temperature and humidity conditions

EN 12430, Thermal insulating products for building applications — Determination of behaviour under point load

EN 12431, Thermal insulating products for building applications — Determination of thickness for floating floor insulating products

EN 13793, Thermal insulating products for building applications — Determination of behaviour under cyclic loading

EN 13820, Thermal insulating products for building applications — Determination of organic content

1 Scope

This European Standard specifies the characteristics and choice of measuring equipment and the procedure for determining the linear dimensions of test specimens which are taken from thermal insulating products. The procedures for measuring the dimensions of full size products are specified in EN 822 and EN 823.

2 Normative references

Not applicable.

3 Terms and definitions

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

3.1

linear dimension

distance between two points, between two parallel lines or between two parallel planes, defined by corners, edges or surfaces of the test specimen

3.2

test specimen

single item or part of an item used for a test

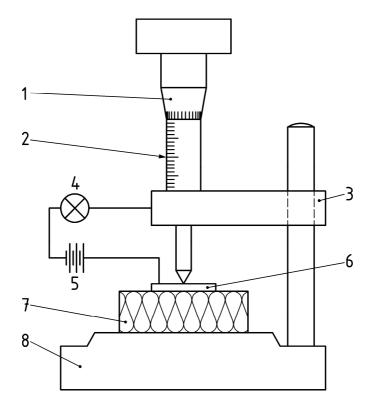
4 Principle

The linear dimensions of a test specimen are measured using an apparatus giving the required degree of accuracy.

5 Apparatus

- **5.1** Flat surface, larger than the largest dimensions of the test specimen.
- **5.2** Dial gauge, permitting reading to at least 0,05 mm. The measuring surface shall be of such a size that the total resultant measuring pressure is \leq 1 kPa.
- NOTE The measuring pressure of the dial gauge can be reduced by removing the spring. The dial gauge, or any other electrical or optical measuring instrument having at least the same accuracy, can be fixed to a device to adapt the testing equipment to the size of the test specimen.
- **5.3** Micrometer, permitting readings to at least 0,05 mm. A micrometer shall only be used if it incorporates a device which indicates the onset of the force applied by the micrometer when it contacts the test specimen surface. An example of such a device is an electrical circuit, consisting of a flexible wire, battery, lamp and an aluminium plate exerting a pressure of $(50 \pm 1,5)$ Pa on the test specimen. An example of such an apparatus is given in Figure 1.
- **5.4** Sliding caliper, permitting readings to at least 0,1 mm. The sliding caliper shall only be used if it does not cause any deformation of the test specimen.
- **5.5** Metal rule or metal tape, graduated in millimetres and permitting reading to at least 0,5 mm.

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



Key

- 1 screw micrometer
- 2 millimetre scale
- 3 adjustable support
- 4 lamp
- 5 battery
- 6 aluminium plate, 10 cm²
- 7 test specimen
- 8 base plate

Figure 1 — Example of apparatus conforming to 5.3

6 Test specimens

The number, dimensions and conditioning of test specimens shall be as defined in the relevant test method standard or any other European technical specification.

7 Procedure

7.1 Test conditions

The test conditions shall be as defined in the relevant test method standard or any other European technical specification.

7.2 Choice of measuring equipment

The choice of measuring equipment shall be in accordance with the required accuracy of the measured value as given in the relevant test method standard or any other European technical specification. Where no such standard or specification exists, the required accuracy shall be agreed between parties, but it shall correspond to the dimensions to be measured.