Thermal insulating products for building equipment and industrial installations - Determination of short term 11 is a provious general area of the water absorption by partial immersion of preformed pipe insulation



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	This Estonian standard EVS-EN 13472:2012 consists
Euroopa standardi EN 13472:2012 ingliskeelset	of the English text of the European standard EN
teksti.	13472:2012.
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avaldamisega EVS Teatajas.	published in the official bulletin of the Estonian Centre
	for Standardisation.
Euroopa standardimisorganisatsioonid on teinud	Date of Availability of the European standard is
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ICS 91.100.60

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# EUROPEAN STANDARD

## NORME EUROPÉENNE

### **EUROPÄISCHE NORM**

October 2012

EN 13472

ICS 91.100.60

Supersedes EN 13472:2001

### **English Version**

# Thermal insulating products for building equipment and industrial installations - Determination of short term water absorption by partial immersion of preformed pipe insulation

Produits isolants thermiques pour l'équipement du bâtiment et les installations industrielles - Détermination de l'absorption d'eau à court terme par immersion partielle des coquilles isolantes préformées Wärmedämmstoffe für die Haustechnik und für betriebstechnische Anlagen - Bestimmung der Wasseraufnahme bei kurzzeitigem teilweisem Eintauchen von vorgeformten Rohrdämmstoffen

This European Standard was approved by CEN on 24 August 2012.

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

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### **Foreword**

This document (EN 13472:2012) has been prepared by Technical Committee 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 April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

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 supersedes EN 13472:2001.

The following main technical changes have been done on this new edition of EN 13472:

- a) Figure 1 has been corrected;
- b) Subclause 5.3, Tap water has been supplemented.

This European Standard has been prepared for products used to insulate building equipment and industrial installations, but it may also be applied to products used in other areas.

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.

According to the CEN/CENELEC Internal Regulations, the national standards organisations 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 equipment and procedures for determining the short term water absorption of preformed pipe insulation by partial immersion in water. It is applicable to thermal insulating products.

NOTE It is intended to simulate the water absorption caused by exposure to rain for 24 h during product installation.

If the pipe insulation is cut from a flat product, then the short term water absorption by partial immersion can be obtained from tests carried out on the flat product with similar properties in accordance with EN 1609, providing the test is carried out in the direction giving the highest water uptake.

### 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 13467, Thermal insulating products for building equipment and industrial installations — Determination of dimensions, squareness and linearity of preformed pipe insulation

#### 3 Terms and definitions

This European Standard contains no terms and definitions.

### 4 Principle

The short term water absorption by partial immersion is determined by measuring the change in mass of a test specimen, the lower part of which is in contact with water for a period of 24 h.

The excess water adhering to the surface and not absorbed by the test specimen is drained off in method A, or calculated in method B, from the initial water uptake.

### 5 Apparatus

- **5.1 Balance** capable of determining the mass of a test specimen to an accuracy of 0,1 g or 0,5 %, whichever is less.
- **5.2** Water tank with a device for keeping the water level constant to within  $\pm 2$  mm, and a device to keep the test specimen in the required position during the test (see examples in Figures 1a) and 1b)).

The supporting device shall be such that the test specimen contact area with water shall be at least 85 % and such that the original form of the test specimen is maintained.

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**5.3** Tap water adjusted to a temperature of  $(23 \pm 5)$  °C.

In case of dispute, deionised water shall be used.

**5.4** Equipment for drainage (see examples in Figures 2a) and 2b)).