

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

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN 13467:2018 sisaldab Euroopa standardi EN 13467:2018 ingliskeelset teksti.	This Estonian standard EVS-EN 13467:2018 consists of the English text of the European standard EN 13467:2018.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.01.2018.	Date of Availability of the European standard is 10.01.2018.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile [standardiosakond@evs.ee](mailto:standardiosakond@evs.ee).

ICS 91.100.60

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:  
Koduleht [www.evs.ee](http://www.evs.ee); telefon 605 5050; e-post [info@evs.ee](mailto:info@evs.ee)

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage [www.evs.ee](http://www.evs.ee); phone +372 605 5050; e-mail [info@evs.ee](mailto:info@evs.ee)

English Version

**Thermal insulating products for building equipment and  
industrial installations - Determination of dimensions,  
squareness and linearity of preformed pipe insulation**

Produits isolants thermiques pour l'équipement du  
bâtiment et les installations industrielles -  
Détermination des dimensions, de l'équerrage et de la  
linéarité des coquilles isolantes préformées

Wärmedämmstoffe für die Haustechnik und für  
betriebstechnische Anlagen - Bestimmung der Maße,  
der Rechtwinkligkeit und der Linearität von  
vorgeformten Rohrdämmstoffen

This European Standard was approved by CEN on 13 November 2017.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

## Contents

Page

European foreword.....	3
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions .....	5
4 Principle .....	7
5 Apparatus.....	7
6 Test specimens.....	9
7 Procedure.....	10
8 Calculation and expression of results.....	12
9 Accuracy of measurement.....	14
10 Test report.....	14

## European foreword

This document (EN 13467:2018) has been prepared by Technical Committee CEN/TC 88 “Thermal insulation 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 July 2018, and conflicting national standards shall be withdrawn at the latest by July 2018.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13467:2001.

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 Regulation (EU) No 305/2011 of the European parliament and of the council of 9 March 2011 laying down harmonized conditions for the marketing of construction products (Construction Product Regulation) through the consideration of the basic requirements.

The main technical changes that have been made in this new edition of EN 13467 are the following:

- a) the term circular segment chord has been included in the standard;
- b) a new Figure 2 was added;
- c) Table 1 has been adjusted;
- d) the document has been editorially revised.

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 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 fall within the scope of CEN/TC 88:

- EN 13467, *Thermal insulating products for building equipment and industrial Installations — Determination of dimensions, squareness and linearity of preformed pipe insulation*
- EN 13468; *Thermal insulating products for building equipment and industrial Installations — Determination of trace quantities of water soluble chloride, fluoride, silicate and sodium ions and pH*
- EN 13469; *Thermal insulating products for building equipment and industrial Installations — Determination of water vapour transmission properties of preformed pipe insulation*
- EN 13470, *Thermal insulating products for building equipment and industrial Installations — Determination of the apparent density of preformed pipe insulation*
- EN 13471, *Thermal insulating products for building equipment and industrial Installations — Determination of the coefficient of thermal expansion*

- EN 13472, *Thermal insulating products for building equipment and industrial Installations — Determination of short term water absorption by partial immersion of preformed pipe insulation*
- EN 14706, *Thermal insulating products for building equipment and industrial Installations — Determination of maximum service temperature*
- EN 14707, *Thermal insulating products for building equipment and industrial Installations — Determination of maximum service temperature for preformed pipe insulation*

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## 1 Scope

This European Standard specifies the equipment and procedures for determining the dimensions, squareness and linearity of preformed pipe insulation, supplied in one piece, half sections or segments. It is applicable to thermal insulating products.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

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

Note 1 to entry: Please also see Figures 1, 2 and 5.

### 3.1

#### **circumference**

$C$

circular length of the outer surface of the pipe insulation

### 3.2

#### **outside diameter**

$D_o$

linear distance between two opposite points on the outside surface of the pipe insulation measured across the centre

### 3.3

#### **inside diameter**

$D_i$

linear distance between two opposite points on the inside surface of the pipe insulation measured across the centre

### 3.4

#### **length**

$l$

linear dimension measured perpendicularly to the circumference of the pipe insulation

### 3.5

#### **thickness**

$d$

thickness of the insulation product measured perpendicularly between the outside and the inside surface of the pipe insulation

### 3.6

#### **thickness uniformity**

$\Delta d$

variation measured on thickness  $d$ , expressed as the difference between the two extremes of the measurements of thickness  $d$