

Thermal insulating products for building equipment and industrial installations - Determination of maximum service temperature for preformed pipe insulation

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14707:2012 sisaldab Euroopa standardi EN 14707:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 14707:2012 consists of the English text of the European standard EN 14707:2012.
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.
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ICS 91.100.60

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English Version

Thermal insulating products for building equipment and industrial installations - Determination of maximum service temperature for preformed pipe insulation

Produits isolants thermiques pour l'équipement du bâtiment et les installations industrielles - Détermination de la température maximale de service des coquilles isolantes préformées

Wärmedämmstoffe für die Haustechnik und für betriebstechnische Anlagen - Bestimmung der oberen Anwendungsgrenztemperatur von vorgeformten Rohrdämmstoffen

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

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Foreword

This document (EN 14707:2012) 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of an identical text or by endorsement, at the latest by April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.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 14707:2005+A1:2007.

The main technical changes that have been made in this new version of EN 14707 are:

- a) 6.1, Dimensions of test specimens has been modified;
- b) B.3, Dimension of test specimens has been completed.

This European Standard is one of a series of European 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 prepared for products used to insulate building equipment and industrial installations, but it may also be applied to products used in other areas.

A similar standard is available for testing of flat products: EN 14706, *Thermal insulating products for building equipment and industrial installations — Determination of maximum service temperature*.

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 maximum service temperature for preformed pipe insulation. It is applicable to thermal insulating products.

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

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

EN 14706, *Thermal insulating products for building equipment and industrial installations — Determination of maximum service temperature*

3 Terms and definitions

For the purposes of this document, the following term and definition applies.

3.1
maximum service temperature
highest temperature at which the insulation product, when installed at the recommended thickness in a given application, continues to function within specified limits of performance

[SOURCE: EN ISO 9229:2007, 2.6.9.1]

Note 1 to entry: The required performance may be in the areas of dimensional stability, thermal properties, and mechanical properties as well as changes in appearance and resistance against creation of hazards such as internal self-heating (see annexes and requirements in the relevant product standard).

Note 2 to entry: In the present test procedure, which is used as a reference, the test specimen is exposed to a temperature difference going from ambient to the maximum service temperature. This may not reflect the actual application conditions when products are exposed to different temperatures on the two main faces, e.g. in multi-layer systems or for faced products where the facing may limit the maximum service temperature.

4 Principle

Measure thickness and length after one sided heat treatment for a specified time period, at the maximum service temperature, achieved using a specified rate of temperature increase. The thickness of the test specimen is measured during heat treatment and the length only after cooling to ambient temperature.

The procedure may be an iterative process.

Additional requirements for assessing the maximum service temperature of specific materials are described in normative annexes to this European Standard or the relevant product standard or any other European Technical Specification.

5 Apparatus

A general arrangement of the apparatus is indicated in Figure 1 and is comprised of: