Hoonete tehnoseadmete ja tööstuspaigaldiste soojusisolatsioonitooted. Tehases valmistatud mineraalvillatooted (MW). Spetsifikatsioon

Thermal insulation products for building equipment and industrial installations - Factory made mineral wool Atic. (MW) products - Specification



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14303:2009+A1:2013	This Estonian standard EVS-EN 14303:2009+A1:2013
sisaldab Euroopa standardi EN	consists of the English text of the European standard
14303:2009+A1:2013 ingliskeelset teksti.	EN 14303:2009+A1:2013.
S	
, , , , , , , , , , , , , , , , , , , ,	This standard has been endorsed with a notification
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
,	30.01.2013.
kättesaadavaks 30.01.2013.	00.01.2010.
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.

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: Aru 10, 10317 Tallinn, Eesti; www.evs.ee; telefon 605 5050; e-post 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: Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

January 2013

EN 14303:2009+A1

ICS 91.100.60

Supersedes EN 14303:2009

English Version

Thermal insulation products for building equipment and industrial installations - Factory made mineral wool (MW) products - Specification

Produits isolants thermiques pour l'équipement du bâtiment et les installations industrielles - Produits manufacturés à base de laines minérales (MW) - Spécification Wärmedämmstoffe für die technische Gebäudeausrüstung und für betriebstechnische Anlagen in der Industrie -Werkmäßig hergestellte Produkte aus Mineralwolle (MW) -Spezifikation

This European Standard was approved by CEN on 29 September 2009 and includes Amendment 1 approved by CEN on 11 November 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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Cont	ents	² age
Forewo	ord	
1	Scope	
2	Normative references	
3	Terms, definitions, symbols, units and abbreviated terms	
4	Requirements	
5	Test methods	
6	Designation code	
7	Evaluation of conformity	
В	Marking and labelling	
	A (normative) Factory production control	
	B (informative) Additional Properties	25
	ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive	
Bibliog	raphy	35
Figures		
Figure	ZA.1 — Example of CE marking information	34
Tables		
Table 1	— Levels and classes for thickness tolerances	11
	2 — Levels and classes for dimensional tolerances	
Table 3	B — Load for thickness measurements	12
Table	4 — Water vapour diffusion equivalent air layer thickness	14
Table 5	i — Test methods, specimens and conditions	17
Table A	A.1 — Minimum product testing frequencies	21
Table A	A.2 — Minimum product testing frequencies for the reaction to fire characteristics	23
Table E	3.1 — Test methods, specimens and conditions	26
	ZA.1 — Relevant clauses	
	ZA.2 — System(s) of attestation of conformity	
	ZA.3 — Assignment of evaluation of conformity tasks for products under system 1	
	ZA.4 — Assignment of evaluation of conformity tasks for products under system 3 or system bined with system 4 for reaction to fire	

Foreword

This European Standard (EN 14303:2009+A1:2013) 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 July 2013, and conflicting national standards shall be withdrawn at the latest by July 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 14303:2009.

This document includes Amendment 1 approved by CEN on 2012-11-11.

The start and finish of text introduced or altered by amendment is indicated in the text by tags [A] (A].

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive 89/106/EEC.

For relationship with EU Directive 89/106/EEC, see informative Annex ZA, which is an integral part of this document.

Locally responsible authorities and contracting entities, who are bound by EU Directives to specify their requirements using European harmonized product standards, are allowed to demand additional properties outside the provisions of this standard if this is technically necessary because of prevailing operational conditions of the building equipment or the industrial installation projected or because of safety regulations.

This European Standard contains three annexes:

- Annex A (normative), Factory production control;
- Annex B (informative), Additional properties;
- Annex ZA (informative), Clauses of this European Standard addressing the provisions of the EU Construction Products Directive.

This document includes a bibliography.

This European Standard is one of a series of standards for insulation products used in building equipment and industrial installations, but this standard can be used in other areas, where appropriate.

In pursuance of Resolution BT 20/1993 revised, CEN/TC 88 have proposed defining the standards listed below as a European package of standards, setting 21 months after availability as the date of withdrawal (dow) of national standards which conflict with the European Standards of this package.

The package of standards comprises the following group of interrelated standards for the specifications of factory made thermal insulation products, all of which come within the scope of CEN/TC 88:

EN 14303, Thermal insulation products for building equipment and industrial installations — Factory made mineral wool (MW) products — Specification

EN 14304, Thermal insulation products for building equipment and industrial installations — Factory made flexible elastomeric foam (FEF) products — Specification

EN 14305, Thermal insulation products for building equipment and industrial installations — Factory made cellular glass (CG) products — Specification

EN 14306, Thermal insulation products for building equipment and industrial installations — Factory made calcium silicate (CS) products — Specification

EN 14307, Thermal insulation products for building equipment and industrial installations — Factory made extruded polystyrene foam (XPS) products — Specification

EN 14308, Thermal insulation products for building equipment and industrial installations — Factory made rigid polyurethane foam (PUR) and polyisocyanurate foam (PIR) products — Specification

EN 14309, Thermal insulation products for building equipment and industrial installations — Factory made products of expanded polystyrene (EPS) — Specification

EN 14313, Thermal insulation products for building equipment and industrial installations — Factory made polyethylene foam (PEF) products — Specification

EN 14314, Thermal insulation products for building equipment and industrial installations — Factory made phenolic foam (PF) products — Specification

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, JS LUXEN erland, . 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 requirements for factory made mineral wool products, which are used for the thermal insulation of building equipment and industrial installations with an operating temperature range of approximately 0 °C to + 800 °C.

NOTE Below an operating temperature of ambient, special means against water vapour diffusion and water accumulation by air flow might be required. Below an operating temperature of - 50 °C, special tests regarding the suitability of the products in the intended application are advised (e.g. liquefaction of oxygen). Manufacturer's advice should be heeded in all cases.

The products are manufactured with or without facings or coatings, in the form of rolls, boards, slabs, mats, felts, quilts, wired mats, lamella mats, bevelled lags and pipe sections.

This European Standard describes product characteristics and includes procedures for testing, evaluation of conformity, marking and labelling.

Products covered by this standard are also used in prefabricated thermal insulation systems and composite panels; the performance of systems incorporating these products is not covered.

This European Standard does not specify the required level of a given property that shall be achieved by a product to demonstrate fitness for purpose in a particular application. The levels required for a given application can be found in regulations and invitations to tender.

Products with a declared thermal conductivity greater than 0,065 W/(m·K) at 10 °C are not covered by this standard.

This Eurpean Standard does not cover products for in situ insulation (blowing or pouring) or products for the insulation of the building structure.

This European Standard does not cover the following acoustical aspects: direct airborne sound insulation and impact noise transmission index.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

- 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 826, Thermal insulating products for building applications Determination of compression behaviour
- EN 1604, Thermal insulating products for building applications Determination of dimensional stability under specified temperature and humidity conditions
- EN 1609, Thermal insulating products for building applications Determination of short term water absorption by partial immersion
- EN 12086, Thermal insulating products for building applications Determination of water vapour transmission properties
- EN 12667, Thermal performance of building materials and products Determination of thermal resistance by means of guarded hot plate and heat flow meter methods Products of high and medium thermal resistance

EN 12939, Thermal performance of building materials and products — Determination of thermal resistance by means of guarded hot plate and heat flow meter methods — Thick products of high and medium thermal resistance

EN 13172, Thermal insulating products — Evaluation of conformity

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, 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 13472, Thermal insulating products for building equipment and industrial installations — Determination of short term water absorption by partial immersion of preformed pipe insulation

EN 13501-1:2007, Fire classification of construction products and building elements — Part 1: Classification using test data from reaction to fire tests

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

EN 13823, Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item

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

EN 15715:2009, Thermal insulation products — Instructions for mounting and fixing for reaction to fire testing — Factory made products

EN ISO 354, Acoustics — Measurement of sound absorption in a reverberation room (ISO 354:2003)

EN ISO 1182, Reaction to fire tests for building products — Non-combustibility test (ISO 1182:2002)

EN ISO 1716, Reaction to fire tests for building products — Determination of the heat of combustion (ISO 1716:2002)

EN ISO 8497, Thermal insulation — Determination of steady-state thermal transmission properties of thermal insulation for circular pipes (ISO 8497:1994)

EN ISO 11654, Acoustics — Sound absorbers for use in buildings — Rating of sound absorption (ISO 11654:1997)

EN ISO 11925-2, Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 2: Single-flame source test (ISO 11925-2:2002)

EN ISO 13787, Thermal insulation products for building equipment and industrial installations — Determination of declared thermal conductivity (ISO 13787:2003)

3 Terms, definitions, symbols, units and abbreviated terms

3.1 Terms and definitions

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