

საქართველოს სტანდარტი

თერმული იზოლაცია შენობების პროდუქტებისათვის - ადგილზე
ფორმირებადი დისპენსერული ხისტი პოლიურეთანი (PUR) და
პოლისოკიანურატის (PIR) ქაფის პროდუქტები - ნაწილი 1: სპეციფიკაციები
დისპენსერული ხისტი ქაფის სისტემები ინსტალაციამდე

საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტო
თბილისი

საინფორმაციო მონაცემები

1 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტებისა
და მეტროლოგიის ეროვნული სააგენტოს 2016 წლის 6 მაისი
№ 41 და 2016 წლის 1 თებერვლის № 7 განკარგულებებით

2 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული
კომიტეტის სტანდარტი ენ 14318-1:2013 „ თერმული იზოლაცია შენობების
პროდუქტებისათვის - ადგილზე ფორმირებადი დისპენსერული ხისტი პოლიურეთანი
(PUR) და პოლისოკიანურატის (PIR) ქაფის პროდუქტები - ნაწილი 1: სპეციფიკაციები
დისპენსერული ხისტი ქაფის სისტემები ინსტალაციამდე“

3 პირველად

4 რეგისტრირებულია საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტოს რეგისტრში: 2016 წლის 6 მაისი
№268-1.3-9056

აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით
გავრცელება

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 14318-1

January 2013

ICS 91.100.60

English Version

**Thermal insulating products for buildings - In-situ formed
dispensed rigid polyurethane (PUR) and polyisocyanurate (PIR)
foam products - Part 1: Specification for the rigid foam
dispensed system before installation**

Produits isolants thermiques destinés aux applications du bâtiment - Produits en mousse rigide de polyuréthane (PUR) ou de polyisocyanurate (PIR) injectée, formés en place - Partie 1 : Spécifications relatives aux systèmes d'injection de mousse rigide avant mise en œuvre

Wärmedämmstoffe für das Bauwesen - An der Verwendungsstelle hergestellter Wärmedämmstoff aus dispesiertem Polyurethan (PUR)- und Polyisocyanurat (PIR)-Hartschaum - Teil 1: Spezifikation für das Schaumsystem vor dem Einbau

This European Standard was approved by CEN on 17 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

Contents

	Page
Foreword	4
1 Scope	5
2 Normative references	5
3 Terms, definitions, symbols and abbreviations	6
3.1 Terms and definitions	6
3.2 Symbols and abbreviations	8
4 Requirements	9
4.1 General	9
4.2 For all applications	10
4.3 Specific applications	12
5 Test methods	14
5.1 Sampling and test specimen preparation	14
5.2 Conditioning	14
5.3 Testing	14
6 Designation code	16
7 Evaluation of conformity	16
7.1 General	16
7.2 Initial type testing	17
7.3 Factory production control	17
8 Marking, labelling and technical information	17
8.1 Marking and labelling	17
8.2 Technical information	17
Annex A (normative) Determination of declared aged thermal conductivity and aged thermal resistance	19
A.1 Introduction	19
A.2 Input data	19
A.3 Declared values	19
Annex B (normative) Determination of substrate adhesion strength perpendicular to faces	21
B.1 Principle	21
B.2 Apparatus	21
B.3 Test specimen	21
B.4 Procedure	21
B.5 Report	22
Annex C (normative) Determination of the aged values of thermal resistance and thermal conductivity	23
C.1 General	23
C.2 Sampling and test specimen preparation	23
C.3 Determination of the initial value of thermal conductivity	24
C.4 Determination of the accelerated aged value of thermal conductivity	25
C.5 Fixed increment procedure	27
C.6 Declaration of the aged values of thermal resistance and aged thermal conductivity	29
Annex D (normative) Initial type testing (ITT) and Factory production control (FPC)	31
Annex E (normative) Determination of the reaction profile and free-rise density	33
E.1 Introduction	33
E.2 Principle	33
E.3 Apparatus	33
E.4 Procedure	33

E.5	Free-rise density.....	34
Annex F (normative) Sample preparation method for the test specimens for the thermal conductivity test.....	35	
Annex G (normative) Sample preparation method for the test specimens other than thermal conductivity.....	36	
G.1 Principle.....	36	
G.2 Procedure	36	
Annex H (normative) Testing for reaction to fire of products	37	
H.1 Scope	37	
H.2 Product and installation parameters	37	
H.3 Mounting and fixing	38	
H.4 Field of application.....	40	
Annex I (normative) Testing for reaction to fire of products in standardised assemblies simulating end-use application(s)	42	
I.1 Scope	42	
I.2 Product and installation parameters	42	
I.3 Mounting and fixing	43	
I.4 Field of application.....	46	
Annex J (informative) Example for the determination of the declared aged values of thermal conductivity and thermal resistance for a product.....	48	
Case where both thermal conductivity and thermal resistance are declared.....	48	
Annex K (normative) Instructions for compiling thermal resistance performance charts.....	50	
K.1 Introduction	50	
K.2 General	50	
K.3 Procedure for the manufacturer to create the performance charts	52	
Annex ZA (informative) Clause of this European Standard addressing the provisions of the provisions of the EU Construction Products Directive	57	
Z.A.1 Scope and relevant characteristics	57	
Z.A.2 Procedure for attestation of conformity of in-situ formed dispensed rigid polyurethane (PUR) and rigid polyisocyanurate foam (PIR) products.....	59	
Z.A.3 CE marking and labelling.....	62	
Bibliography.....	64	

Foreword

This document (EN 14318-1:2013) 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 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(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

This European Standard consists of two parts which form a package. The first part is the harmonised part satisfying the mandate and the CPD and is the basis for the CE marking covering the products, which are placed on the market. The second part, which is the non-harmonised part, covers the specification for the installed products. Both parts need to be used for the application of the insulation product in the end-use applications covered by EN 14318.

This European Standard is one of a series for mineral wool, expanded clay, expanded perlite, exfoliated vermiculite, polyurethane/polyisocyanurate, cellulose, bound expanded polystyrene and expanded polystyrene in-situ formed insulation products used in buildings, but this standard may be used in other areas where appropriate.

The reduction in energy used and emissions produced during the installed life of insulation products exceeds by far the energy used and emissions made during the production and disposal processes.

This European Standard, EN 14318-1, *Thermal insulating products for buildings — In-situ formed dispensed rigid polyurethane (PUR) and polyisocyanurate (PIR) foam products*, consists of the following parts:

- Part 1: *Specification for the rigid foam dispensed system before installation* (the present document)
- Part 2: *Specification for the installed insulation products*

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.