

საქართველოს სტანდარტი

თერმული იზოლაციის პროდუქტები შენობის აღჭურვილობისა და
ინდუსტრიული ინსტალაციებისათვის - ადგილზე ფორმირებადი
დისპენსერული ხისტი პოლიურეთანი (PUR) და პოლისოკიანურატის (PIR)
ქაფის პროდუქტები - ნაწილი 1: სპეციფიკაციები დისპენსერული ხისტი
ქაფის სისტემებისათვის 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 14320-1:2013 „, თერმული იზოლაციის პროდუქტები შენობის
აღჭურვილობისა და ინდუსტრიული ინსტალაციებისათვის - ადგილზე ფორმირებადი
დისპენსერული ხისტი პოლიურეთანი (PUR) და პოლისოკიანურატის (PIR) ქაფის
პროდუქტები - ნაწილი 1: სპეციფიკაციები დისპენსერული ხისტი ქაფის სისტემებისათვის
ინსტალაციამდე“

3 პირველად

4 რეგისტრირებულია საქართველოს სტანდარტებისა და მეტროლოგიის
ეროვნული სააგენტოს რეესტრში: 2016 წლის 6 მაისი
№268-1.3-9058

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

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 14320-1

January 2013

ICS 91.100.60

English Version

Thermal insulating products for building equipment and industrial installations - In-situ formed sprayed rigid polyurethane (PUR) and polyisocyanurate foam (PIR) products - Part 1: Specification for the rigid foam spray system before installation

Produits isolants thermiques pour l'équipement du bâtiment et les installations industrielles - Produits en mousse rigide de polyuréthane (PUR) ou de polyisocyanurate (PIR) projetée, formés en place - Partie 1 : Spécifications relatives aux systèmes de projection de la mousse rigide avant mise en œuvre

Wärmedämmstoffe für die technische Gebäudeausrüstung und für betriebstechnische Anlagen in der Industrie - An der Verwendungsstelle hergestellter Wärmedämmstoff aus Polyurethan (PUR)- und Polyisocyanurat (PIR)-Spritzschaum - Teil 1: Spezifikation für das Schaumsystem vor dem Einbau

This European Standard was approved by CEN on 24 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 For specific applications	12
5 Test methods	15
5.1 Sampling	15
5.2 Conditioning	15
5.3 Testing	15
6 Designation code	18
7 Evaluation of conformity	18
7.1 General	18
7.2 Initial type testing	19
7.3 Factory production control	19
8 Marking, labelling and technical information	19
8.1 Marking and labelling	19
8.2 Technical information	19
Annex A (normative) Initial Type Testing (ITT) and Factory Production Control (FPC)	21
Annex B (normative) Preparation of the test sample	23
B.1 Principle	23
B.2 Procedure for thermal conductivity samples	23
B.3 Procedure for samples to be used for other test specimens	23
Annex C (normative) Determination of the aged values of thermal resistance and thermal conductivity	24
C.1 General	24
C.2 Sampling and test specimen preparation	25
C.3 Determination of the initial value of thermal conductivity	25
C.4 Determination of the accelerated aged value of thermal conductivity	26
C.5 Fixed increment procedure	28
C.6 "Safe values" curve of aged thermal conductivity values versus temperature	31
Annex D (normative) Determination of the reaction profile and free-rise density	32
D.1 Introduction	32
D.2 Principle	32
D.3 Apparatus	32
D.4 Procedure	32
D.5 Free-rise density	33
Annex E (normative) Determination of substrate adhesion strength perpendicular to faces	34
E.1 Principle	34
E.2 Apparatus	34
E.3 Sample preparation and conditioning	34
E.4 Preparation of test specimens	34
E.5 Testing procedure	34

E.6	Presentation of results.....	34
Annex F (normative) Testing for reaction to fire of the products.....35		
F.1	Scope	35
F.2	Product and installation parameters	35
F.3	Mounting and fixing	36
F.4	Field of application.....	38
Annex G (normative) Testing for reaction to fire of products in standardised assemblies simulating end-use application(s) 40		
G.1	Scope	40
G.2	Product and installation parameters	40
G.3	Mounting and fixing	41
G.4	Field of application.....	45
Annex ZA (informative) Clause of this European Standard addressing the provisions of the EU Construction Products Directive 47		
ZA.1	Scope and relevant characteristics	47
ZA.2	Procedure for attestation of conformity of in-situ formed sprayed rigid polyurethane (PUR) and rigid polyisocyanurate foam (PIR) products.....	48
Bibliography.....55		

Foreword

This document (EN 14320-1:2013) 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 products in the end-use applications covered by the EN 14320.

This European Standard is one of a series for expanded perlite, exfoliated vermiculite and polyurethane/polyisocyanurate in-situ formed insulation products used in building equipment and industrial installations, 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 document is one of a series of standards as listed below:

EN 14320, *Thermal insulating products for building equipment and industrial installations — In-situ formed sprayed rigid polyurethane (PUR) and polyisocyanurate foam (PIR) 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.