

Geregistreeerde Belgische norm

NBN EN 14315-2

1e uitg., maart 2013

Normklasse: B 62

Materialen voor de thermische isolatie van gebouwen - In-situ gevormde producten van hard polyurethaanschuim (PUR) en polyisocyanuraatschuim (PIR) - Deel 2: Specificatie voor de geïnstalleerde producten

Produits isolants thermiques destinés aux applications du bâtiment - Produits en mousse rigide de polyuréthane (PUR) ou de polyisocyanurate (PIR) projetée, formés en place - Partie 2 : Spécifications relatives aux produits isolants après mise en oeuvre

Thermal insulating products for buildings - In-situ formed sprayed rigid polyurethane (PUR) and polyisocyanurate (PIR) foam products - Part 2: Specification for the installed insulation products

Toelating tot publicatie: 22 maart 2013

Deze Europese norm EN 14315-2:2013 heeft de status van een Belgische norm.

Deze Europese norm bestaat in drie officiële versies (Duits, Engels, Frans).

***norme belge
enregistrée***

NBN EN 14315-2

1e éd., mars 2013

Indice de classement: B 62

**Produits isolants thermiques destinés aux applications du bâtiment -
Produits en mousse rigide de polyuréthane (PUR) ou de
polyisocyanurate (PIR) projetée, formés en place - Partie 2 :
Spécifications relatives aux produits isolants après mise en oeuvre**

Materialen voor de thermische isolatie van gebouwen - In-situ gevormde producten van hard polyurethaanschuim (PUR) en polyisocyanuraatschuim (PIR) - Deel 2: Specificatie voor de geïnstalleerde producten

Thermal insulating products for buildings - In-situ formed sprayed rigid polyurethane (PUR) and polyisocyanurate (PIR) foam products - Part 2: Specification for the installed insulation products

Autorisation de publication: 22 mars 2013

La présente norme européenne EN 14315-2:2013 a le statut d'une norme belge.

La présente norme européenne existe en trois versions officielles (allemand, anglais, français).

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 14315-2

January 2013

ICS 91.100.60

English Version

Thermal insulating products for buildings - In-situ formed
sprayed rigid polyurethane (PUR) and polyisocyanurate (PIR)
foam products - Part 2: Specification for the installed insulation
products

Produits isolants thermiques destinés aux applications du bâtiment - Produits en mousse rigide de polyuréthane (PUR) ou de polyisocyanurate (PIR) projetée, formés en place - Partie 2 : Spécifications relatives aux produits isolants après mise en oeuvre

Wärmedämmstoffe für das Bauwesen - An der Verwendungsstelle hergestellter Wärmedämmstoff aus Polyurethan(PUR)- und Polyisocyanurat(PIR)-Spritzschaum - Teil 2: Spezifikation für die eingebauten Produkte

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	3
1 Scope	4
2 Normative references	4
3 Terms, definitions, symbols and abbreviations	4
3.1 Terms and definitions	4
3.2 Symbols and abbreviations	6
4 Requirements	6
4.1 General	6
4.2 Suitability of the building for the installation of the product	6
5 In-situ measurements and calculations	6
5.1 Declared installed insulation thickness	6
5.2 Declared installed aged thermal resistance, R_D	6
5.3 Declared installed insulation density	6
5.4 Foam quality checks carried out by the installer	7
6 Guidelines for installation	7
7 Installer's declaration	7
Annex A (normative) Method of the determination of the declared installed insulation thickness	8
Procedure	8
Annex B (normative) Methods for the determination of the declared installed insulation density	9
B.1 Principle	9
B.2 Procedure	9
B.2.1 General	9
B.2.2 Destructive testing	9
B.2.3 Non-destructive testing	9
B.3 Test report	9
Annex C (normative) Immersion method for the determination of the declared installed insulation density	10
C.1 Scope	10
C.2 Principles	10
C.3 Necessary equipment	10
C.4 Products and reagents	10
C.5 Procedure	10
C.6 Results	11
Annex D (normative) Suitability of the building to receive the insulation product	12
D.1 Building	12
D.2 Site survey	12
Annex E (normative) Installation guidelines	13
E.1 General	13
E.2 Substrate preparation	13
E.3 Substrate conditions	13
E.4 Spraying machine preparation	13
E.4.1 Preparation	13
E.4.2 Mixing ratio	13
E.5 Spraying procedure	14
E.6 Protection against UV radiation	14
E.7 An example of a suitable declaration form which can be used by the installer	15
Bibliography	16

Foreword

This document (EN 14315-2:2013) 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 European Standard consists of two parts which form a package. The first part is the harmonised part satisfying the mandate and the CPD and which 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 EN 14315.

Attention is drawn to the need to take into account any complementary member state rules (e.g. installation rules) which together with this Part 2 of this European Standard ensures the fitness for purpose of the installed product.

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.

EN 14315, *Thermal insulating products for buildings — In-situ formed sprayed rigid polyurethane (PUR) and polyisocyanurate (PIR) foam products*, consists of the following parts:

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

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.

EN 14315-2:2013 (E)

1 Scope

This European Standard specifies requirements for in-situ formed sprayed rigid polyurethane (PUR) and polyisocyanurate (PIR) foam products when applied to walls, ceilings, roofs, suspended ceilings and floors.

This Part 2 of this European Standard is a specification for the installed insulation product.

This Part 2 of this European Standard describes, when taken together with Part 1 of EN 14315, the product characteristics that are linked to the essential requirements of the EU Construction Products Directive. It also specifies the checks and tests to be used for the declarations made by the installer of the product.

This European Standard does not specify the required levels of all properties to be achieved by a product to demonstrate fitness for purpose in a particular application. The required levels are to be found in regulations or non-conflicting standards.

This European Standard does not cover factory made rigid polyurethane (PUR) or polyisocyanurate (PIR) foam products or in-situ products intended to be used for the insulation of building equipment and industrial installations.

NOTE Foam products are either called flexible or rigid. The flexible products are used in upholstery and mattresses and are characterised by their ability to deflect, support and recover to their original thickness continually during their in-use phase. Those that are not flexible are termed rigid and do not possess these flexible characteristics. They are mostly used for thermal insulation purposes and vary widely in their compression strength values. Once the cell structure is crushed in a rigid foam, it does not recover its thickness fully. Some of these rigid foams are very low in density with very low compression strengths and are sometimes described “commercially” as “soft foams” or “semi-rigid” foams. This note has been included to clarify that all foams with such descriptions are covered by this standard’s used of the term rigid foam.

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 1602, *Thermal insulating products for building applications — Determination of the apparent density*

EN 14315-1:2013, *Thermal insulating products for buildings — In-situ formed sprayed rigid polyurethane (PUR) and polyisocyanurate (PIR) foam products — Part 1: Specification for the foam system before installation*

EN ISO 9229:2007, *Thermal insulation — Vocabulary (ISO 9229:2007)*

3 Terms, definitions, symbols and abbreviations

3.1 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 9229:2007 and the following apply.

3.1.1

polyurethane foam PUR (in-situ formed products)

rigid cellular plastics insulation material or product with a structure based on polymers mainly of the polyurethane type