

BSI Standards Publication

Thermal insulation products for buildings - In-situ formed loose-fill mineral wool (MW) products

Part 1: Specification for the loose-fill products before installation



BS EN 14064-1:2018 BRITISH STANDARD

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National foreword

This British Standard is the UK implementation of EN 14064-1:2018. It supersedes BS EN 14064-1:2010, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PRI/72, Rigid cellular materials.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2018 Published by BSI Standards Limited 2018

ISBN 978 0 580 88143 5

ICS 91.100.60

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 November 2018.

Amendments/corrigenda issued since publication

Date Text affected

EN 11061_1

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EUROPÄISCHE NORM

October 2018

ICS 91.100.60

Supersedes EN 14064-1:2010

English Version

Thermal insulation products for buildings - In-situ formed loose-fill mineral wool (MW) products - Part 1: Specification for the loose-fill products before installation

Produits isolants thermiques pour le bâtiment -Isolation thermique formée sur chantier à base de laine minérale (MW) - Partie 1: Spécification des produits en vrac avant l'installation Wärmedämmstoffe für Gebäude - An der Verwendungsstelle hergestellte Wärmedämmung aus Mineralwolle (MW) - Teil 1: Spezifikation für Schüttdämmstoffe vor dem Einbau

This European Standard was approved by CEN on 2 March 2018.

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.

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EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Con	ontents		
Europ	oean foreword	5	
1	Scope	7	
2	Normative references	7	
3	Terms, definitions, symbols and abbreviations	8	
3.1	Terms and definitions		
3.2	Symbols and abbreviations	9	
4	Characteristics		
4.1	General		
4.2	For all applications		
4.2.1	Thermal conductivity – Thermal resistance		
4.2.2	Weight of the sale unit		
4.2.3	Settlement		
4.2.4	Reaction to fire Durability characteristics		
4.2.5 4.3	For specific applications		
4.3 4.3.1	General		
4.3.1 4.3.2	Airflow resistivity		
4.3.2 4.3.3	Water absorption		
4.3.4	Water vapour diffusion resistance		
4.3.5	Reaction to fire of product in standardized assemblies simulating end-use	13	
11010	applications	13	
4.3.6	Release of dangerous substances	13	
4.3.7	Continuous glowing combustion		
5	Test methods	14	
5.1	Sampling		
5.2	Conditioning		
5.3	Testing		
5.3.1	General		
5.3.2	Thermal resistance and thermal conductivity	15	
5.3.3	Reaction to fire		
6	Designation code		
6.1	General	16	
6.2	Assessment and Verification of the Constancy of Performance (AVCP)General	16	
6.3	Factory production control	17	
7	Marking and labelling	17	
Anne	x A (normative) Determination of the declared values of thermal resistance and thermal conductivity	20	
A.1	General	20	
A.2	Input data	20	
A.3	Declared values	20	
Anne	x B (normative) Factory production control	24	

Annex	conductivity test	26
C.1	Principle	26
C.2	Procedure	26
Annex	D (normative) Specimen preparation method for water absorption test	29
D.1	Principle	29
D.2	Procedure	29
Annex	E (normative) Specimen preparation method for air flow resistivity test — Principle	30
Annex	F (normative) Testing for reaction to fire of products	31
F.1	Scope	31
F.2	Product and installation parameters	31
F.3	Standardized Mounting and fixing	32
Annex	G (normative) Testing for reaction to fire of products in standardized assemblies simulating end-use application(s)	33
G.1	Scope	33
G.2	Product and installation parameters	33
G.3	Standardized Mounting and fixing	34
Annex	H (normative) Rules for creating performance charts for loose-fill insulation and examples of performance charts	35
H.1	General	35
H.2	Performance chart for loft application when method 1 or 2 (Annex A) are used	35
Н.3	Performance chart for masonry cavity wall insulation, and frame constructions insulation (method 1 Annex A)	38
Annex	I (normative) Specimen preparation method for coverage and density measurement	40
I.1	Principle	40
I.2	Procedure for attics floors application	40
I.3	Procedure for closed construction	41
Annex	J (normative) Thermal insulating products for lofts and closed cavities - Determination of settlement for blown or injected loose fill insulation	46
J.1	Settlement after ageing	46
J.2	Test report	50
Annex	K (informative) Masonry cavity walls - Method for determining suitable spacings for blowing holes	51
K.1	Test house	51
K.2	Test method	51
K.3	Observations	51
K.4	Installation procedure	51

BS EN 14064-1:2018

EN 14064-1:2018 (E)

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Annex ZA (informative)	Relationship of this European Standard with Regulation (EU)
No.305/2011	
Bibliography	57

European foreword

This document (EN 14064-1:2018) 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 2019 and conflicting national standards shall be withdrawn at the latest by July 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 14064-1:2010.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association.

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

EN 14064-1:2018 includes the following significant technical changes with respect to EN 14064-1:2010:

- Improved clarification regarding how to determine lambda value in the application: Annex A has been totally revised and Annex C has been revised to be more precise;
- New ways to assess settlement in cavity wall application and then a new Annex I has been defined;
- Clarification of Annex H;
- Specimen preparation method for coverage and density measurement: Annex I has been totally revised;
- Introduction of glowing combustion;
- New Annex ZA.

EN 14064, Thermal insulation products for buildings — In situ formed loose-fill mineral wool (MW) products, consists of two parts which form a package. The first part (this European Standard), which is the harmonized part satisfying the mandate, Construction Product regulation (CPR) and is the basis for the CE marking, covers the products, which are placed on the market. The second part, which is the non-harmonized 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 14064.

This European Standard contains twelve annexes:

- Annex A (normative) Determination of the declared values of thermal resistance and thermal conductivity
- Annex B (normative) Factory production control
- Annex C (normative) Specimen preparation for thermal resistance and thermal conductivity test

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- Annex D (normative) Specimen preparation for water absorption test
- Annex E (normative) Specimen preparation for airflow resistivity test
- Annex F (normative) Testing for reaction to fire of products
- Annex G (normative) Testing for reaction to fire of products in standardized assemblies simulating end-use applications
- Annex H (normative) Rules for creating performance charts for loose-fill insulation and examples of performance charts
- Annex I (normative) Specimen preparation method for coverage and density measurement
- Annex J (normative) Determination of settlement for blown loose fill insulation
- Annex K (informative) Masonry cavity walls Method for determining suitable spacing for blowing holes
- Annex ZA (informative) Relationship of this European Standard with Regulation (EU) No.305/2011

This European Standard is one of a series for mineral wool, expanded clay, expanded perlite, exfoliated vermiculite, polyurethane/polyisocyanurate, cellulose and bound 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.

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, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the requirements for blown and injected loose-fill mineral wool products for *in situ* installation in lofts, masonry cavity walls and frame constructions.

This document is a specification for the insulation products before installation. It describes the product characteristics and includes procedures for testing, marking and labelling.

This document does not specify the required level of a given property to be achieved by a product to demonstrate fitness for purpose in a particular application. The levels required for a given application are to be found in regulations or non-conflicting standards.

NOTE To avoid water penetration in masonry walls special tests adjusted to local climate might be needed.

This document does not cover factory made mineral wool (MW) insulation products or *in situ* products intended to be used for the insulation of building equipment and industrial installations.

Products with a declared thermal resistance lower than $0.25 \text{ m}^2 \cdot \text{K/W}$ or a declared thermal conductivity greater than $0.060 \text{ W/(m} \cdot \text{K})$ at $10 \, ^{\circ}\text{C}$ are not covered by this document.

This document does not cover products intended for airborne sound insulation and for acoustic absorption applications.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 823, Thermal insulating products for building applications - Determination of thickness

EN 1609, Thermal insulating products for building applications - Determination of short term water absorption by partial immersion

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 13172, Thermal insulation products - Evaluation of conformity

EN 13501-1, Fire classification of construction products and building elements - Part 1: Classification using 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 15715, Thermal insulation products - Instructions for mounting and fixing for reaction to fire testing - Factory made products

EN 16516:2017, Construction products: Assessment of release of dangerous substances - Determination of emissions into indoor air

EN 16733, Reaction to fire tests for building products - Determination of a building product's propensity to undergo continuous smouldering

EN 29053, Acoustics - Materials for acoustical applications - Determination of airflow resistance (ISO 9053)