

**Ehituslikud soojusisolatsioonitooted. Kasutuskohas valmistatavad mineraalvillatooted (MW). Osa 1: Puistetoodete paigalduseelne spetsifikatsioon**

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

<b>EESTI STANDARDI EESSÕNA</b>	<b>NATIONAL FOREWORD</b>
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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

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## Foreword

This document (EN 14064-1:2010) 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of an identical text or by endorsement, at the latest by August 2010, and conflicting national standards shall be withdrawn at the latest by November 2011.

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.

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 harmonised part satisfying the mandate, the CPD and is the basis for the CE marking, covers 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 14064.

This European Standard contains thirteen 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
- 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 standardised 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) Verification of performance chart according to Annex H (normative)
- Annex J (normative) Specimen preparation method for coverage measurement
- Annex K (normative) Thermal insulating products for lofts – Determination of settlement for blown loose fill insulation
- Annex L (informative) Masonry cavity walls – Method for determining suitable spacing for blowing holes

- Annex ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Directive

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

## 1 Scope

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

This European standard 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 m<sup>2</sup>·K/W or a declared thermal conductivity greater than 0,060 W/(m·K) at 10 °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 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 823, *Thermal insulating products for building applications — Determination of thickness*

EN 1609:1996, *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 13172:2008, *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 15715:2009, *Thermal insulation products — Instructions for mounting and fixing for reaction to fire testing — Factory made products*

EN 29053:1993, *Acoustics — Materials for acoustical applications — Determination of air flow resistance (ISO 9053:1991)*

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 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)*

### 3 Terms, definitions, symbols and abbreviations

#### 3.1 Terms and definitions

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

##### 3.1.1

##### **mineral wool**

insulation material having a woolly consistency, manufactured from molten rock, slag or glass

##### 3.1.2

##### **blowing hole**

hole, cut or formed, in a masonry cavity wall or frame construction, through which the mineral wool is blown

##### 3.1.3

##### **class**

combination of two levels of the same property between which the performance shall fall

##### 3.1.4

##### **coverage**

mass of insulation per unit area

##### 3.1.5

##### **frame construction**

walls with wood or metal studs, sloping roof with insulation between rafters

##### 3.1.6

##### **level**

given value, which is the upper or lower limit of a requirement, where the level is given by the declared value of the characteristic concerned

##### 3.1.7

##### **performance chart**

table giving thickness and coverage requirements for different values of declared thermal resistance

##### 3.1.8

##### **settlement**

decrease of installed insulation thickness in lofts or height in cavities and frame constructions with time, expressed as a percentage of the initial installed thickness or installed height

#### 3.2 Symbols and abbreviations

Symbols used in this document:

$\lambda_{90/90}$	is the 90 % fractile with a confidence level of 90 % for the thermal conductivity	W/(m·K)
$\lambda_D$	is the declared thermal conductivity	W/(m·K)
$\lambda_i$	is one test result of thermal conductivity	W/(m·K)
$\lambda_{\text{mean}}$	is the mean thermal conductivity	W/(m·K)