Ehituslikud soojus- ja heliisolatsioonitooted. EPStäitematerjaliga mört. Osa 1: Nõuded tööstuslikult valmistatud EPS kuivsegule

Themal and/or sound insulating products in building construction - Bound EPS ballastings - Part 1: pre. Requirements for factory premixed EPS dry plaster



# **EESTI STANDARDI EESSÕNA**

# **NATIONAL FOREWORD**

See Eesti standard EVS-EN 16025-1:2013 sisaldab	This Estonian standard EVS-EN 16025-1:2013
Euroopa standardi EN 16025-1:2013 ingliskeelset	consists of the English text of the European standard
teksti.	EN 16025-1:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
	Date of Availability of the European standard is 01.05.2013.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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ICS 91.100.60

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# **EUROPEAN STANDARD**

# EN 16025-1

# NORME EUROPÉENNE EUROPÄISCHE NORM

May 2013

ICS 91.100.60

# **English Version**

# Thermal and/or sound insulating products in building construction - Bound EPS ballastings - Part 1: Requirements for factory premixed EPS dry plaster

Produits isolants thermiques et/ou acoustiques utilisés dans la construction des bâtiments - Empierrements en PSE lié - Partie 1: exigences pour un pré-mélange en usine plâtre sec PSE

Wärmedämmstoffe für den Wärme- und/oder Schallschutz im Hochbau - Gebundene EPS-Schüttungen - Teil 1: Anforderungen an den werkmäßig vorgemischten EPS-Trockenmörtel

This European Standard was approved by CEN on 23 February 2013.

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

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# **Foreword**

This document (EN 16025-1:2013) 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 November 2013, and conflicting national standards shall be withdrawn at the latest by November 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 document consists of two parts which form a package:

- EN 16025-1, Thermal and/or sound insulating products in building construction Bound EPS ballastings
   Part 1: Requirements for factory premixed EPS dry plaster
- EN 16025-2, Thermal and/or sound insulating products in building construction Bound EPS ballastings
   Part 2: Processing of the factory premixed EPS dry plaster

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 the standard.

This document is one of a series for mineral wool, expanded clay, expanded perlite, exfoliated vermiculite, polyurethane/polyisocyanurate, cellulose, bound EPS and expanded polystyrene in-situ formed insulation products used in buildings, but this document 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 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.

# 1 Scope

This European Standard specifies the requirements for in-situ formed bound EPS products (BEPS) for the thermal and/or sound insulation of buildings when applied to walls, ceilings, roofs and floors.

This European Standard covers products which are manufactured as premixed EPS dry plaster/mortar in a factory or mobile production unit.

This European Standard is a specification for the bound EPS products before installation.

This European Standard describes the product characteristics and includes procedures for testing, marking and labelling and the rules for evaluation of conformity.

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

Products with a declared thermal conductivity at 10 °C greater than 0,18  $W/(m \cdot K)$  are not covered by this European Standard.

This European Standard does not cover factory made insulation products in the form of prefabricated shapes or boards made of bound EPS.

This European Standard also specifies performance requirements for airborne sound insulation and for acoustic absorption applications.

#### 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 826, Thermal insulating products for building applications — Determination of compression behaviour

EN 933-1, Tests for geometrical properties of aggregates — Part 1: Determination of particle size distribution — Sieving method

EN 1097-3, Tests for mechanical and physical properties of aggregates — Part 3: Determination of loose bulk density and voids

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

EN 1606, Thermal insulating products for building applications — Determination of compressive creep

EN 1609:2013, Thermal insulating products for building applications — Determination of short term water absorption by partial immersion

EN 12086:2013, Thermal insulating products for building applications — Determination of water vapour transmission properties

EN 12350-6, Testing fresh concrete — Part 6: Density

EN 12431, Thermal insulating products for building applications — Determination of thickness for floating floor insulating products

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 12939, Thermal performance of building materials and products — Determination of thermal resistance by means of guarded hot plate and heat flow meter methods — Thick products of high and medium thermal resistance

EN 13172:2012, 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 13823:2010, Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item

EN 29052-1, Acoustics — Determination of dynamic stiffness — Part 1: Materials used under floating floors in dwellings

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

EN ISO 11925-2, Reaction to fire tests — Ignitability of products subjected to direct impingement of flame — Part 2: Single-flame source test (ISO 11925-2)

# 3 Terms and definitions, symbols and abbreviated terms

# 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

#### fresh mortar

EPS dry mortar mixed with water on the construction site

#### 3.1.2

# bound EPS (BEPS)

installed and hardened fresh mortar for use as insulating material for thermal and/or impact noise insulation

#### 3.1.3

#### class

combination of two levels of the same or different property between which the performance falls, where the levels are given by the declared value of the characteristic concerned

### 3.1.4

#### level

given value, which is the upper or lower limit of a requirement

Note 1 to entry: The level is given by the declared value of the characteristic concerned.

# 3.1.5

# factory premixed EPS dry mortar

loose dry mixture of EPS aggregate and mineral binder for producing bound EPS