

Ehituslikud soojusisolatsioonitooted. Kasutuskohas valmistatavad puistetselluloosist (LFCI) tooted. Osa 1: Toodete spetsifikatsioon enne paigaldamist

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15101-1:2013 sisaldab Euroopa standardi EN 15101-1:2013 ingliskeelset teksti.	This Estonian standard EVS-EN 15101-1:2013 consists of the English text of the European standard EN 15101-1:2013.
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English Version

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

Produits isolants thermiques destinés aux applications du bâtiment - Isolation thermique formée en place à base de cellulose (LFCI) - Partie 1 : Spécification des produits en vrac avant la mise en oeuvre

Wärmedämmstoffe für Gebäude - An der Verwendungsstelle hergestellter Wärmedämmstoff aus Zellulosefüllstoff (LFCI) - Teil 1: Spezifikation für die Produkte vor dem Einbau

This European Standard was approved by CEN on 8 August 2013.

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Contents

Page

Foreword.....	5
1 Scope	6
2 Normative references	6
3 Terms, definitions, symbols and abbreviations	7
3.1 Terms and definitions	7
3.2 Symbols	8
3.3 Abbreviations	9
4 Requirements	9
4.1 General	9
4.2 For all applications	9
4.2.1 Thermal resistance and thermal conductivity	9
4.2.2 Settlement	10
4.2.3 Reaction to fire	10
4.2.4 Durability	10
4.3 For specific applications	11
4.3.1 General	11
4.3.2 Short-term water absorption	11
4.3.3 Water vapour diffusion resistance factor	11
4.3.4 Dangerous substances	11
4.3.5 Corrosion resistance of the insulation material on certain metals	11
4.3.6 Mould fungi resistance	11
4.3.7 Airflow resistivity	12
4.3.8 Continuous Glowing Combustion	12
4.3.9 Sound absorption	12
4.3.10 Reaction to fire of product in standardised assemblies simulating end-use applications	12
5 Test methods	13
5.1 Sampling	13
5.2 Conditioning	13
5.3 Testing	13
5.3.1 General	13
5.3.2 Thermal resistance and thermal conductivity	15
6 Designation code	15
7 Evaluation of conformity	16
7.1 General	16
7.2 Initial type testing	16
7.3 Factory production control	16
8 Marking and labelling	16
Annex A (normative) Determination of declared thermal resistance and thermal conductivity	17
A.1 General	17
A.2 Input data	17
A.3 Declared values of thermal resistance and thermal conductivity	17
Annex B (normative) Laboratory methods for the determination of settlement	19
B.1 Blown LFCI for ventilated attics (open blow) — determination of settlement under cyclic humidity	19
B.1.1 Principle	19
B.1.2 Apparatus	19
B.1.3 Test specimens	19
B.1.4 Test procedure	19

B.1.5	Test report	21
B.2	Blown LFCI in timber and steel framed walls – determination of settlement under vibrations	21
B.2.1	Principle	21
B.2.2	Apparatus	21
B.2.3	Test specimen	23
B.2.4	Procedure	23
B.2.5	Calculation and expression of test results	24
B.2.6	Accuracy of measurements	24
B.2.7	Test report	24
B.3	Blown LFCI for ventilated attics — determination of settlement under impact excitation and under increased temperature and moisture (informative and for FPC only)	25
B.3.1	Principle	25
B.3.2	Apparatus	25
B.3.3	Test specimens	26
B.3.4	Test procedure	27
B.3.5	Calculations and expression of results	27
B.3.6	Test report	28
Annex C	(normative) Testing for reaction to fire of products	30
C.1	Scope	30
C.1.1	General	30
C.1.2	Product and installation parameters	30
C.1.3	Ignitability (EN ISO 11925-2)	31
C.1.4	Single Burning Item [SBI] (EN 13823) for loose-fill cellulose insulation products	32
Annex D	(normative) Specimen preparation method for the water absorption test	36
D.1	Principle	36
D.2	Conditioning	36
D.3	Procedure	36
Annex E	(normative) Method of test for corrosion resistance	37
E.1	Principle	37
E.2	Conditioning	37
E.3	Reagents and materials	37
E.4	Apparatus	37
E.5	Procedure	38
E.6	Classification of the results	38
E.7	Report	38
Annex F	(normative) Method for determining mould fungi resistance	39
F.1	Scope	39
F.2	Significance and use	39
F.3	Apparatus	39
F.4	Reagents and materials	39
F.4.1	Water	39
F.4.2	Inoculum	40
F.5	Specimens	40
F.5.1	Viability control specimens	40
F.5.2	Comparative material	40
F.5.3	Test specimens	40
F.6	Procedure	40
F.6.1	Spore suspension	40
F.6.2	Inoculation of test specimens, comparative material and control specimens	41
F.6.3	Incubation	41
F.7	Test analysis	41
F.7.1	General	41
F.7.2	Validation	42
F.7.3	Classification	42
F.8	Report	42
F.9	Precision and bias	42

Annex G (normative) Specimen preparation method for the airflow resistance test	43
G.1 Principle	43
G.2 Procedure	43
Annex H (normative) Specimen preparation method for thermal resistance and thermal conductivity test	44
H.1 Principle	44
H.2 Procedure	44
H.2.1 Horizontal applications, loft and floors	44
H.2.2 Cavity insulation, frame constructions and cavity walls	45
Annex I (normative) Factory production control	47
Annex J (normative) Testing for reaction to fire of products in standardised assemblies simulating end-use application(s)	50
J.1 Scope	50
J.2 Product and installation parameters	50
J.3 Mounting and fixing	51
J.3.1 Ignitability (EN ISO 11925-2)	51
J.3.2 Single Burning Item [SBI] (EN 13823)	51
J.4 Field of application	54
Annex K (normative) An example of a performance chart	56
Annex ZA (informative) Clause of this European Standard addressing the provisions of the EU Construction Products Directive	57
ZA.1 Scope and relevant characteristics	57
ZA.2 Procedure for attestation of conformity of in situ formed loose-fill cellulose	59
ZA.2.1 System(s) of attestation of conformity	59
ZA.2.2 EC Certificate and Declaration of conformity	61
ZA.3 CE marking and labelling	62
Bibliography	64

Foreword

This document (EN 15101-1:2013) 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 March 2014, and conflicting national standards shall be withdrawn at the latest by March 2014.

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 installation checks for the installed products.

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.

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 requirements for loose-fill cellulose insulation (LFCI) products for the thermal and/or sound insulation of buildings when installed into walls, floors, galleries, roofs and ceilings.

This European Standard is a specification for the loose-fill cellulose insulation (LFCI) 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.

Products covered by this European Standard may also be used in prefabricated thermal insulation systems and composite panels; the structural performance of systems incorporating these products is not covered.

Products with a declared thermal conductivity at 10 °C greater than 0,060 W/(m × K) or a declared thermal resistance lower than 0,25 m² × K/W are not covered by this European Standard.

This European Standard does not specify the required level 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 local regulations or non-conflicting standards.

This European Standard does not cover factory made cellulose products placed on the market as bats, mats or boards intended to be used for the insulation of buildings or loose-fill cellulose products for the insulation of building equipment and industrial installations.

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 312, *Particleboards - Specifications*

EN 508-1, *Roofing products from metal sheet — Specification for self-supporting products of steel, aluminium or stainless steel sheet — Part 1: Steel*

EN 520, *Gypsum plasterboards — Definitions, requirements and test methods*

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

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

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 13172:2012, *Thermal insulating products — Evaluation of conformity*

EN 13238, *Reaction to fire tests for building products — Conditioning procedures and general rules for selection of substrates*

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 29053, *Acoustics — Materials for acoustical applications — Determination of airflow resistance (ISO 9053)*

EN ISO 354:2003, *Acoustics — Measurement of sound absorption in a reverberation room (ISO 354:2003)*

EN ISO 10456 *Building materials and products — Hygrothermal properties — Tabulated design values and procedures for determining declared and design thermal values (ISO 10456)*

EN ISO 11654, *Acoustics — Sound absorbers for use in buildings — Rating of sound absorption (ISO 11654)*

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)*

ISO 12491, *Statistical methods for quality control of building materials and components*

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

open blow applications

all applications except cavity applications

3.1.2

declared insulation thickness: “open blow” applications

installed insulation thickness minus the thickness loss according to the settlement class of the product

3.1.3

declared insulation thickness: cavity applications

identical with the thickness of the cavity

3.1.4

floor

horizontal division between two storeys, over a crawl space or a floor directly on the ground

3.1.5

frame construction

walls with wood or metal studs, sloping roof with insulation between and above rafters, as well as stud girders and internal and external insulation on solid masonry construction

3.1.6

settlement

decrease of installed insulation thickness in lofts or height in cavities and frame constructions either under vibration, humidity, cyclic conditions and time, expressed as a percentage of the initial installed insulation thickness (after compaction if required)

3.1.7

coverage

mass of insulation per unit area

3.1.8

performance chart

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