
Toplotnoizolacijski proizvodi za stavbe - Razsuti celulozni proizvodi (LFCI) za oblikovanje na mestu vgradnje - 1. del: Specifikacija za proizvode pred vgradnjo

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

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

(standards.iteh.ai)

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

Ta slovenski standard je istoveten z: EN 15101-1:2013+A1:2019

ICS:

91.100.60	Materiali za toplotno in zvočno izolacijo	Thermal and sound insulating materials
-----------	---	--

SIST EN 15101-1:2013+A1:2019 en,fr,de

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN 15101-1:2013+A1:2019

<https://standards.iteh.ai/catalog/standards/sist/fc5b24a5-5d74-4ab6-bbc3-d25faef3595d/sist-en-15101-1-2013a1-2019>

EUROPEAN STANDARD

EN 15101-1:2013+A1

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2019

ICS 91.100.60

Supersedes EN 15101-1:2013

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 and includes Amendment 1 approved by CEN on 6 January 2019.

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.

(standards.iteh.ai)

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.

<https://standards.iteh.ai/catalog/standards/sist/fc5b24a5-5d74-4ab6-bbc3->

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

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

Contents	Page
European Foreword.....	6
1 Scope	7
2 Normative references	7
3 Terms, definitions, symbols and abbreviations	8
3.1 Terms and definitions	8
3.2 Symbols	9
3.3 Abbreviations	10
4 Requirements	10
4.1 General	10
4.2 For all applications	10
4.3 For specific applications	12
5 Test methods	14
5.1 Sampling	14
5.2 Conditioning	14
5.3 Testing	15
6 Designation code	17
7 Evaluation of conformity	17
7.1 General	17
7.2 A1 Deleted text A1 Type Testing	17
7.3 Factory production control	18
7.4 A1 Initial Inspection	18
7.5 Continuous Surveillance	18
Annex A (normative) Determination of declared thermal resistance and thermal conductivity	19
A.1 General	19
A.2 Input data	19
A.3 Declared values of thermal resistance and thermal conductivity	19
Annex B (normative) Laboratory methods for the determination of settlement	21
B.1 Blown LFCI for ventilated attics (open blow) — determination of settlement under cyclic humidity	21
B.1.1 Principle	21
B.1.2 Apparatus	21
B.1.3 Test specimens	21
B.1.4 Test procedure	21
B.1.5 Test report	22
B.2 Blown LFCI in timber and steel framed walls – determination of settlement under vibrations	23
B.2.1 Principle	23

B.2.2	Apparatus	23
B.2.3	Test specimen	25
B.2.4	Procedure	25
B.2.5	Calculation and expression of test results	25
B.2.6	Accuracy of measurements	26
B.2.7	Test report	26
B.3	Blown LFCI for ventilated attics — determination of settlement under impact excitation and under increased temperature and moisture (informative and for FPC only).....	27
B.3.1	Principle.....	27
B.3.2	Apparatus	28
B.3.3	Test specimens	29
B.3.4	Test procedure	29
B.3.5	Calculations and expression of results	30
B.3.6	Test report	31
Annex C	(normative) Testing for reaction to fire of products	32
C.1	Scope	32
C.1.1	General	32
C.1.2	Product and installation parameters	32
C.1.3	Ignitability (EN ISO 11925-2)	33
C.1.4	Single Burning Item [SBI] (EN 13823) for loose-fill cellulose insulation products	34
Annex D	(normative) Specimen preparation method for the water absorption test	38
D.1	Principle.....	38
D.2	Conditioning	38
D.3	Procedure	38
Annex E	(normative) Method of test for corrosion resistance	39
E.1	Principle.....	39
E.2	Conditioning	39
E.3	Reagents and materials	39
E.4	Apparatus	39
E.4.1	Humidity chamber, maintained at $(40 \pm 2) ^\circ\text{C}$ and $(90 \text{ to } 95) \%$ relative humidity	39
E.4.2	Four cylindrical glass crystallizing dishes, well washed, nominally 90 mm in diameter and 50 mm deep.....	39
E.4.3	Rubber or PVC gloves	39
E.4.4	Stainless steel spatula	39
E.4.5	Tweezers.....	39
E.5	Procedure	40

EN 15101-1:2013+A1:2019 (E)

E.6	[A₁] Declaration [A₁] of the results	40
E.7	Report	41
Annex F (normative) Method for determining mould fungi resistance		42
F.1	Scope	42
F.2	Significance and use	42
F.3	Apparatus	42
F.4	Reagents and materials	42
F.5	Specimens	43
F.5.1	Viability control specimens	43
F.5.2	Comparative material	43
F.5.3	Test specimens	43
F.6	Procedure	43
F.6.1	Spore suspension	43
F.6.2	Inoculation of test specimens, comparative material and control specimens	44
F.6.3	Incubation	44
F.7	Test analysis	44
F.7.1	General	44
F.7.2	Validation	44
F.7.3	Classification	44
F.8	Report	45
F.9	Precision and bias	45
Annex G (normative) Specimen preparation method for the airflow resistance test		46
G.1	Principle	46
G.2	Procedure	46
Annex H (normative) Specimen preparation method for thermal resistance and thermal conductivity test		47
H.1	Principle	47
H.2	Procedure	47
H.2.1	Horizontal applications, loft and floors	47
H.2.2	Cavity insulation, frame constructions and cavity walls	48
Annex I (normative) Factory production control		50
Annex J (normative) Testing for reaction to fire of products in standardized assemblies simulating end-use application(s)		53
J.1	Scope	53
J.2	Product and installation parameters	53
J.3	Mounting and fixing	54
J.3.1	Ignitability (EN ISO 11925-2)	54

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN 15101-1:2013+A1:2019](https://standards.iteh.ai/catalog/standards/sist/fc5b24a5-5d74-4ab6-bbc3-d25faef3595d/sist-en-15101-1-2013a1-2019)

<https://standards.iteh.ai/catalog/standards/sist/fc5b24a5-5d74-4ab6-bbc3-d25faef3595d/sist-en-15101-1-2013a1-2019>

J.3.2	Single Burning Item [SBI] (EN 13823)	54
J.4	Field of application	57
Annex K	(normative) An example of a performance chart	60
Annex ZA	(informative) A1 Relationship of this European Standard with Regulation (EU) No.305/2011	61
ZA.1	Scope and relevant characteristics	61
ZA.2	System of Assessment and Verification of Constancy of Performance (AVCP)	63
ZA.3	Assignment of AVCP tasks	63
Bibliography	66

iTeh STANDARD PREVIEW **(standards.iteh.ai)**

[SIST EN 15101-1:2013+A1:2019](https://standards.iteh.ai/catalog/standards/sist/fc5b24a5-5d74-4ab6-bbc3-d25faef3595d/sist-en-15101-1-2013a1-2019)

<https://standards.iteh.ai/catalog/standards/sist/fc5b24a5-5d74-4ab6-bbc3-d25faef3595d/sist-en-15101-1-2013a1-2019>

EN 15101-1:2013+A1:2019 (E)

European Foreword

This document (EN 15101-1:2013+A1:2019) 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 October 2019, and conflicting national standards shall be withdrawn at the latest by October 2019.

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 has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association A1 *deleted text* A1.

For relationship with EU A1 Regulation A1(s), see informative Annex ZA, which is an integral part of this document.

This document includes Amendment 1 approved by CEN on 01 January 2019.

This document supersedes EN 15101-1:2013.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

This European Standard consists of two parts which form a package. The first part is the harmonized part satisfying the mandate A1 *deleted text* A1 and is the basis for the CE marking covering the products, which are placed on the market. The second part, which is the non-harmonized 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, Serbia 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 (standards.iteh.ai)

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 and cladding products from metal sheet - Specification for self-supporting 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 insulating 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 insulation 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 15101-1:2013+A1:2019 (E)

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 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)*

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 10456:2007)*

EN ISO 11654, *Acoustics - Sound absorbers for use in buildings - Rating of sound absorption (ISO 11654:1997)*

EN ISO 11925-2, *Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test (ISO 11925-2:2010)*

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

3 Terms, definitions, symbols and abbreviations

3.1 Terms and definitions

iTech STANDARD PREVIEW
(standards.iteh.ai)

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

3.1.1

open blow applications

all applications except cavity applications

[SIST EN 15101-1:2013+A1:2019](https://standards.iteh.ai/catalog/standards/sist/en-15101-1-2013a1-2019)

<https://standards.iteh.ai/catalog/standards/sist/en-15101-1-2013a1-2019>

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

A1 Deleted text A1

3.1.9**loose-fill cellulose insulation (LFCI)**

fibre, fibrous or granulated insulation material derived from paper, paper stock and/or wood, leave or stalk strings with or without binders which are blown, injected or applied with or without moisture

3.2 Symbols

ρ	is the density after settlement testing	kg/m ³
$R_{90/90}$	is the 90 % fractile with a confidence level of 90 % for the thermal resistance	m ² K/W
R_D	is the declared thermal resistance	m ² K/W
R_{mean}	is the mean thermal resistance	m ² K/W
d	is the declared insulation thickness	mm
W_p	is the short-term water absorption	kg/m ²
α_p	practical sound absorption coefficient	
α_w	weighted sound absorption coefficient	
R_a	is the level of airflow resistivity	kPa s/m ²
S_0	is the height before the settlement tests	mm
s_D	is the mean declared settlement value	mm
S_i	is the mean value of measured insulation height for settlement process number i	mm
s_λ	is the estimate of the standard deviation of the thermal conductivity	W/(m × K)
$\lambda_{90/90}$	is the 90 % fractile with a confidence level of 90 % for the thermal conductivity	W/(m × K)
λ_D	is the declared thermal conductivity	W/(m × K)
λ_i	is one test result of thermal conductivity	W/(m × K)
λ_{mean}	is the mean thermal conductivity	W/(m × K)
μ	is the water vapour diffusion resistance factor	
N	is the number of test results	
ρ	is the bulk density before settlement test	kg/m ³

EN 15101-1:2013+A1:2019 (E)

AF	is the symbol for the level of airflow resistivity
BA	is the symbol for the declared class for resistance to biological agents
CR	is the symbol for the declared $\boxed{A_1}$ level $\langle A_1 \rangle$ for corrosion
SH	is the declared class of settlement for horizontal applications loft and floors
SC	is the declared $\boxed{A_1}$ level $\langle A_1 \rangle$ of settlement for cavity insulation, frame constructions and cavity walls
WS	is the symbol of the declared level for short-term water absorption
NOTE	There are additional symbols in Annex B which are not listed here.

3.3 Abbreviations

- $\boxed{A_1}$ TT is Type Testing $\langle A_1 \rangle$
- LFCI is Loose-Fill Cellulose Insulation

4 Requirements**4.1 General**

Product properties shall be tested in accordance with Clause 5. To conform to this standard, products shall meet the requirements of 4.2 and 4.3 as appropriate.

This European Standard gives an example of a manufacturer's performance chart (declared thermal resistance related to the declared density range) which can be adapted for any application, see Annex K.

NOTE Different applications can require different classes for settlement. One test result of a product property is the average of the measured values on the number of test specimens given in Table 6.

4.2 For all applications**4.2.1 Thermal resistance and thermal conductivity**

Thermal resistance and thermal conductivity shall be based upon measurements carried out in accordance with EN 12667 and/or EN 12939 for thick products and 5.3.2.

The thermal values shall be determined in accordance with Annex A, 5.1 and 5.3.2 and declared by the manufacturer, according to the following:

- the reference mean temperature shall be 10 °C;
- the values shall be measured in dry conditions but the values declared shall be given for the product when conditioned at 23 °C and a relative humidity of 50 % (see 5.2);
- the thermal resistance, R_D , shall always be declared. The thermal conductivity, λ_D , shall be declared where possible;
- the thermal resistance, R_D , and the thermal conductivity, λ_D , shall be given as limit values representing at least 90 % of the production determined with a confidence level of 90 %;
- the measured values shall be expressed to three significant figures;

- the declared thermal resistance, R_D , shall be calculated from the declared thermal insulation thickness and the corresponding λ_D , taking into account the declared settlement s_D (see NOTE below);
- the value of thermal conductivity λ_D shall be rounded upwards to the nearest 0,001 W/(m × K) and declared in levels with steps of 0,001 W/(m × K); the thermal conductivity value shall be declared;
- the value of thermal resistance, R_D , shall be rounded downwards to the nearest 0,05 m² K/W and declared in levels with steps of 0,05 m² K/W; since LFCI can be installed at a variety of thickness (e.g. in a void or cavity) a table giving declared R -values at different thickness shall be used for marking and labelling.

NOTE The thermal resistance for loose-fill cellulose insulation is declared by the manufacturer in accordance with the declared density range using thermal conductivity measurements taken at densities across the declared density range and the worst result used as the declared value (see Annex K).

4.2.2 Settlement

4.2.2.1 General

Settlement shall be determined by testing by the appropriate method given in Annex B.

4.2.2.2 Horizontal applications, loft and floors

Settlement shall be classified and declared in accordance with Table 1. The classification shall be based on measurements made in accordance with the laboratory method B.1 given in Annex B (temperature and humidity cycle).

Table 1 — Classes for settlement for horizontal applications, lofts and floors

Class	Requirement
SH 0	No measureable settlement (≤ 1 %)
SH 5	≤ 5 %
SH 10	≤ 10 %
SH 15	≤ 15 %
SH 20	≤ 20 %
SH 25	≤ 25 %
SH 30	> 25 %

4.2.2.3 Cavity insulation, frame constructions and cavity walls

Settlement shall be ~~A1~~ declared in accordance with Table 2. The ~~A1~~ declaration ~~A1~~ shall be based on the long-term settlement experience after installation or measurements made in accordance with the laboratory Method B.2 given in Annex B.

EN 15101-1:2013+A1:2019 (E)

Table 2 — $\boxed{A_1}$ Declaration $\boxed{A_1}$ for settlement for cavity insulation, frame constructions and cavity walls $\boxed{A_1}$

Settlement (%)
SC

 $\boxed{A_1}$ **4.2.3 Reaction to fire**

Reaction to fire classification of the product, as placed on the market, shall be determined in accordance with EN 13501-1 and the basic mounting and fixing rules given in Annex C.

4.2.4 Durability**4.2.4.1 General**

The appropriate durability characteristics have been considered and are covered in 4.2.4.2 to 4.2.4.3.

4.2.4.2 Durability of reaction to fire against ageing/degradation

The long-term fire resistance of LFCI does not change with time.

4.2.4.3 Durability of thermal resistance against ageing/degradation

All durability aspects of thermal conductivity are detailed in Annex A. In particular, settlement and change in thickness over time for open blow applications needs to be considered.

4.3 For specific applications**4.3.1 General**

[SIST EN 15101-1:2013+A1:2019
https://standards.iteh.ai/catalog/standards/sist/fc5b24a5-5d74-4ab6-bbc3-d25faef3595d/sist-en-15101-1-2013a1-2019](https://standards.iteh.ai/catalog/standards/sist/fc5b24a5-5d74-4ab6-bbc3-d25faef3595d/sist-en-15101-1-2013a1-2019)

If there is no intended requirement for a property, as described in 4.3, for a product in its end-use application, then the property does not need to be determined and declared by the manufacturer.

4.3.2 Short-term water absorption

Short-term water absorption, W_p , shall be determined in accordance with EN 1609, Method A with specimen preparation in accordance with Annex D. Test results shall be classified according to Table 3.

Table 3 — Classes of short-term water absorption

Class	Requirements
WS1	$\leq 1,0 \text{ kg/m}^2$
WS 2	$\leq 2,0 \text{ kg/m}^2$

 $\boxed{A_1}$

WS 3	$> 2.0 \text{ kg/m}^2$
------	------------------------

 $\boxed{A_1}$ **4.3.3 Water vapour diffusion resistance factor**

Loose-fill Cellulose products have a structure that is highly permeable to water vapour. The water vapour resistance factor, μ , may be assumed to be 1 if no measurements are available. If measurements

are undertaken, the product shall be tested in accordance with EN 12086, climatic condition A. Alternatively, values cited in EN ISO 10456 may be used.

4.3.4 Dangerous substances

National regulations on dangerous substances may require verification and declaration on release, and sometimes content, when construction products covered by this standard are placed on those markets.

A1 Deleted text **A1**

NOTE An informative database covering European and national provisions on dangerous substances is available at the Construction website on EUROPA accessed through: <http://ec.europa.eu/enterprise/construction/cpd-ds/>

4.3.5 Corrosion resistance of the insulation material on certain metals

A1 Corrosion resistance shall be declared CR after testing in accordance with Annex E. **A1**

A1 Deleted text **A1**

4.3.6 Mould fungi resistance

A1 Resistance to mould fungi shall be classified and declared in accordance with Table F.1 after testing in accordance with the procedure given in Annex F. **A1**

Table 4 — Classes for mould fungi resistance

Class BA	Intensity of growth in relation to comparative material
0	no mould visible on specimen surface, examined with reflected-light microscope at 50× magnification
1	mould growth not or hardly visible to the naked eye, but clearly visible at 50× magnification
2	mould clearly visible to the naked eye – considerably weaker than on the comparison material
3	mould clearly visible to the naked eye – equal or more intensive than on the comparison material

4.3.7 Airflow resistivity

The airflow resistivity, r_a , shall be determined in accordance with EN 29053, Method A using specimens prepared in accordance with Annex G. The value of the airflow resistivity shall be declared in levels with steps of 1 kPa s/m². No test result shall be lower than the declared value.

NOTE Airflow resistivity can be used when estimating the risk for reduced thermal resistance caused by convection or when evaluating the sound insulation capability.

4.3.8 Continuous Glowing Combustion

A1 When declared, the continuous smouldering combustion shall be tested in accordance with EN 16733.

If the product does not show propensity for continuous smouldering combustion, NoS shall be included in the designation code.

If the product shows propensity for continuous smouldering combustion, S shall be included in the product designation code. **A1**