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Thermal insulation products for buildings - Factory made wood fibre (WF) products - Specification

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

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English Version

Thermal insulation products for buildings - Factory made wood fibre (WF) products - Specification

Produits isolants thermiques pour le bâtiment - Produits manufacturés en fibres de bois (WF) - Spécification

Wärmedämmstoffe für Gebäude - Werksmäßig hergestellte Produkte aus Holzfasern (WF) - Spezifikation

This European Standard was approved by CEN on 6 October 2012 and includes Amendment 1 approved by CEN on 15 December 2014.

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.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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EN 13171:2012+A1:2015 (E)

Foreword

This document (EN 13171:2012+A1:2015) 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of an identical text or by endorsement, at the latest by August 2015, and conflicting national standards shall be withdrawn at the latest by November 2016.

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 Construction Products Regulation (CPR), see informative Annex ZA, which is an integral part of this standard. (4)

This document supersedes A EN 13171:2012 A.

This document includes Amendment 1 approved by CEN on 2014-12-15.

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

Compared with EN 13171:2008, the main changes are:

- a) better harmonisation between the individual standards of the package (EN 13162 to EN 13171) on definitions, requirements, classes and levels;
- b) new normative annex on multi-layer products;
- c) changes of some editorial and technical content and addition of information on some specific items such
 as for WF: determination of thermal conductivity in relation to moisture content, thickness, compressive
 stress or compressive strength, tensile strength perpendicular to faces;
- addition of links to EN 15715, Thermal insulation products Instructions for mounting and fixing for reaction to fire testing – Factory made products;
- e) changes of Annex ZA.
- Amendment 1 modifies EN 13171:2012 identifying those clauses of the standard which are needed for the compliance of the European Standard with the Construction Products Regulation (CPR).

This amendment introduces

- f) an addition to the foreword;
- g) an addition in 3.2;
- h) a new subclause 4.3.15;
- i) modification of Clause 7;
- j) modification of Clause 8;

- k) modification of Annex B;
- I) a new Annex ZA. (A1

This European Standard is one of a series of standards for insulation products used in buildings, but this standard may be used in other areas where appropriate.

In pursuance of Resolution BT 20/1993 revised, CEN/TC 88 have proposed defining the standards listed below as a package of European Standards, setting 21 months after availability as the date of withdrawal (dow) of national standards which conflict with the European Standards of this package.

The package of standards comprises the following group of interrelated standards for the specifications of factory made thermal insulation products, all of which come within the scope of CEN/TC 88:

EN 13162, Thermal insulation products for buildings — Factory made mineral wool (MW) products — Specification

EN 13163, Thermal insulation products for buildings — Factory made expanded polystyrene (EPS) products — Specification

EN 13164, Thermal insulation products for buildings — Factory made extruded polystyrene foam (XPS) products — Specification

EN 13165, Thermal insulation products for buildings — Factory made rigid polyurethane foam (PU) products — Specification

EN 13166, Thermal insulation products for buildings — Factory made phenolic foam (PF) products — Specification

EN 13167, Thermal insulation products for buildings — Factory made cellular glass (CG) products — Specification

EN 13168, Thermal insulation products for buildings — Factory made wood wool (WW) products — Specification

EN 13169, Thermal insulation products for buildings — Factory made expanded perlite board (EPB) products — Specification

EN 13170, Thermal insulation products for buildings — Factory made products of expanded cork (ICB) — Specification

EN 13171, Thermal insulation products for buildings — Factory made wood fibre (WF) products — Specification

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

EN 13171:2012+A1:2015 (E)

1 Scope

This European Standard specifies the requirements for factory made wood fibre (WF) products, with or without facings or coatings, which are used for the thermal insulation of buildings¹⁾. The products are manufactured in the form of rolls, batts, felts, boards or slabs.

Products covered by this standard are also used in prefabricated thermal insulation systems and composite panels; the performance of systems incorporating these products is not covered.

This standard describes product characteristics and includes procedures for testing, evaluation of conformity, marking and labelling.

This standard 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 classes and levels required for a given application are to be found in regulations or non-conflicting standards.

Products with a declared thermal resistance lower than 0,20 m²·K/W or a declared thermal conductivity greater than 0,070 W/(m·K) at 10 °C are not covered by this standard.

This standard does not cover in situ insulation products and products intended to be used 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 822, Thermal insulating products for building applications — Determination of length and width

EN 823, Thermal insulating products for building applications — Determination of thickness

EN 824, Thermal insulating products for building applications —Determination of squareness

EN 825, Thermal insulating products for building applications — Determination of flatness

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

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

EN 1603, Thermal insulating products for building applications — Determination of dimensional stability under constant normal laboratory conditions (23 °C/50 % relative humidity)

EN 1604, Thermal insulating products for building applications — Determination of dimensional stability under specified temperature and humidity conditions

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

EN 1607, Thermal insulating products for building applications — Determination of tensile strength perpendicular to faces

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¹⁾ Wood fibre products for applications other than thermal insulation are covered by EN 316.

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EN 1608, Thermal insulating products for building applications — Determination of tensile strength parallel to faces

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

EN 12086:1997, Thermal insulating products for building applications — Determination of water vapour transmission properties

EN 12430, Thermal insulating products for building applications — Determination of behaviour under point load

EN 12431, Thermal insulating products for building applications — Determination of thickness for floating floor insulation 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, 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 29052-1, Acoustics — Determination of dynamic stiffness — Part 1: Materials used under floating floors in dwellings (ISO 9052-1)

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

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

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

EN ISO 10456:2007, 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)

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)

ISO 16269-6:2005, Statistical interpretation of data — Part 6: Determination of statistical tolerance intervals

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