

BSI Standards Publication

Prefabricated gypsum plasterboard panels with a cellular paperboard core — Definitions, requirements and test methods



BS EN 13915:2017 BRITISH STANDARD

National foreword

This British Standard is the UK implementation of EN 13915:2017. It supersedes BS EN 13915:2007, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/544, Plastering, rendering, dry lining.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2017 Published by BSI Standards Limited 2017

ISBN 978 0 580 92280 0

ICS 91.100.10

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2017.

Amendments/corrigenda issued since publication

Date Text affected

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 13915

July 2017

ICS 91.100.10

Supersedes EN 13915:2007

English Version

Prefabricated gypsum plasterboard panels with a cellular paperboard core - Definitions, requirements and test methods

Panneaux de cloison préfabriqués en plaques de plâtre à âme cellulaire en carton - Définitions, exigences et méthodes d'essai Gipsplatten-Wandbaufertigtafeln mit einem Kartonwabenkern - Begriffe, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 29 July 2016.

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, 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: Avenue Marnix 17, B-1000 Brussels

Cont	ents	Page
Europ	ean foreword	4
1	Scope	5
2	Normative references	5
3	Terms and definitions	6
4	Requirements	
4.1	Fire behaviour	
4.1.1	Reaction to fire	
4.1.2	Fire resistance	
4.2	Impact resistance	
4.3	Water vapour permeability (expressed as water vapour resistance factor)	7
4.4	Flexural strength (expressed as deflection under a defined load)	
4.5	Direct airborne sound insulation	7
4.6	Acoustic absorption	7
4.7	Thermal resistance (expressed as thermal conductivity)	
4.8	Dimensions and tolerances	
4.9	Alignment	8
4.10	Core adhesion	
4.11	Release of dangerous substance	
4.12	Flatness of panels	
5	Test methods	
5.1	Sampling	
5.2	Dimensional measurements	
5.2.1	Width	
5.2.2	Length	
5.2.3	Thickness	
5.3 5.3.1	Determination of alignmentPrinciple	
5.3.1 5.3.2	Apparatus	
5.3.2 5.3.3	Procedure	
5.3.4	Expression of results	
5.3.4 5.4	Determination of deflection	
5.4.1	Principle	
5.4.2	Apparatus	
5.4.3	Procedure	
5.4.4	Expression of results	
5.5	Determination of the core adhesion	
5.5.1	Principle	
5.5.2	Apparatus	
5.5.3	Procedure	13
5.5.4	Expression of results	13
5.6	Determination of surface hardness of the panel	14
5.6.1	Principle	14
5.6.2	Apparatus	15
5.6.3	Procedure	
5.6.4	Expression of results	
5.7	Determination of the panel's flatness	17

5.7.1	Principle	17
5.7.2	Apparatus and specimens	17
5.7.3	Procedure	
5.7.4	Expression of results	17
6	Assessment and verification of constancy of performance – AVCP	17
6.1	General	17
6.2	Type testing	
6.2.1	General	18
6.2.2	Determination of the product type	18
6.2.3	Further type testing	18
6.3	Factory production control (FPC)	
6.3.1	General	
6.3.2	Personnel	
6.3.3	Equipment	
6.3.4	Raw materials and components	
6.3.5	Product testing and evaluation	
6.3.6	Traceability and marking	
6.3.7	Non-conforming products	
6.3.8	Corrective action	
6.3.9	Other test methods	19
7	Designation of the prefabricated gypsum plasterboard panels	19
8	Marking, labelling and packaging	20
Annex	A (informative) Sampling procedure for testing	21
A.1	General	21
A.2	Sampling procedure	21
Annex	B (normative) Mounting and fixing in the test according to EN 13823 (SBI test)	22
B.1	General	
•		
Annex	ZA (informative) Relationship of this European Standard with Regulation (EU) No.305/2011	24
ZA.1	Scope and relevant characteristics	24
ZA.2	System of Assessment and Verification of Constancy of Performance (AVCP)	25
ZA.3	Assignment of AVCP tasks	25
Biblio	graphy	

European foreword

This document (EN 13915:2017) has been prepared by Technical Committee CEN/TC 241 "Gypsum and gypsum based products", the secretariat of which is held by AFNOR.

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 January 2018, and conflicting national standards shall be withdrawn at the latest by April 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 supersedes EN 13915:2007.

The main changes that have been made in this new edition of EN 13915 are the following:

- a) deletion of the Introduction;
- b) normative references have been updated;
- c) Clause 6 and Annex ZA have been revised to be in line with the Construction Products Regulation (CPR);
- d) document has been editorially revised.

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 Regulation (EU) No. 305/2011.

For relationship with Regulation (EU) No. 305/2011, see informative Annex ZA, which is an integral part of this document.

This European standard includes:

- informative Annex A concerning sampling procedure for testing;
- normative Annex B concerning SBI mounting and fixing for prefabricated panels made of plasterboard facings and a cellular paperboard core.

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

1 Scope

This European Standard specifies the characteristics and performance of prefabricated panels made of gypsum plasterboard facings complying with EN 520 and a cellular paperboard core intended to be used as a lightweight partition, lining and encasement for general use in buildings.

This standard covers the following characteristics: reaction to fire, water vapour permeability, flexural strength (breaking load) and thermal resistance to be measured according to the corresponding European test methods.

This Standard covers only prefabricated panels installed so that the core is not exposed.

The following performance characteristics are linked to systems assembled with prefabricated panels made of gypsum plasterboard facings and a cellular paperboard core: shear strength, fire resistance, direct airborne sound insulation, acoustic absorption and air permeability to be measured according to the corresponding European test methods. If required, tests should be done on assembled systems simulating the end use conditions.

This document covers also additional technical characteristics that are of importance for the use and acceptance of the product by the Building Industry.

It provides the assessment and verification of constancy of performance of the products.

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 520:2004+A1:2009, Gypsum plasterboards — Definitions, requirements and test methods

EN 12664:2001, Thermal performance of building materials and products — Determination of thermal resistance by means of guarded hot plate and heat flow meter methods — Dry and moist products of medium and low thermal resistance

EN 13501-1:2007+A1:2009, Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests

EN 13501-2:2016, Fire classification of construction products and building elements — Part 2: Classification using data from fire resistance tests, excluding ventilation services

EN 13823:2010+A1:2014, Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item

EN 13963:2014, Jointing materials for gypsum boards — Definitions, requirements and test methods

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

EN ISO 717-1:2013, Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation (ISO 717-1:2013)

EN ISO 10140-2:2010, Acoustics — Laboratory measurement of sound insulation of building elements — Part 2: Measurement of airborne sound insulation (ISO 10140-2:2010)

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)