Kipsplaatide ühendusmaterjalid. Määratlused, nõuded ja katsemeetodid

gy, t me. Jointing materials for gypsum boards - Definitions, requirements and test methods



#### EESTI STANDARDI EESSÕNA

See Eesti standard EVS-EN 13963:2014 sisaldab Euroopa standardi EN 13963:2014 ingliskeelset teksti.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 09.07.2014.

Standard on kättesaadav Eesti Standardikeskusest.

### NATIONAL FOREWORD

This Estonian standard EVS-EN 13963:2014 consists of the English text of the European standard EN 13963:2014.

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 09.07.2014.

The standard is available from the Estonian Centre for Standardisation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 91.100.10

#### Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega: Aru 10, 10317 Tallinn, Eesti; <a href="www.evs.ee">www.evs.ee</a>; telefon 605 5050; e-post <a href="mailto:info@evs.ee">info@evs.ee</a>

#### The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation: Aru 10, 10317 Tallinn, Estonia; www.evs.ee; phone 605 5050; e-mail info@evs.ee

# EUROPEAN STANDARD NORME EUROPÉENNE

EN 13963

EUROPÄISCHE NORM

July 2014

ICS 91.100.10

Supersedes EN 13963:2005

#### **English Version**

# Jointing materials for gypsum boards - Definitions, requirements and test methods

Matériaux de jointoiement pour plaques de plâtre -Définitions, spécifications et méthodes d'essai Materialien für das Verspachteln von Gipsplattenfugen -Begriffe, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 22 May 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.

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

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

#### Contents Page Foreword......5 2 Normative references ......6 Terms and definitions, symbols, abbreviations and classification......6 3 3.1 Terms and definitions ......6 3.2 Symbols and abbreviations ......7 Classification of compounds......7 3.3 Requirements 8 4 4.1 Reaction to fire......8 Flexural strength (expressed as breaking load)......8 4.2 4.3 Dangerous substances ......8 Setting time ......9 4.4 4.5 Cracking......9 4.6 Particle size distribution ......9 4.7 Adhesion/cohesion......9 4.8 Dimensional stability of paper tape ......9 Tensile strength of paper tape ......9 4.9 4.10 Additional requirements for jointing compounds Types H1, H2, H3 (with reduced water absorption) ......9 5 5.1 5.2 5.2.1 5.2.2 Procedure 10 5.2.3 5.2.4 5.3 Principle.......11 5.3.1 5.3.2 5.3.3 5.3.4 5.4 5.4.1 5.4.2 Apparatus \_\_\_\_\_\_13 Procedure \_\_\_\_\_\_13 5.4.3 Expression of results \_\_\_\_\_\_13 544 5.5 5.5.1 5.5.2 5.5.3 5.5.4 5.6 5.6.1 5.6.2 5.6.3 Procedure \_\_\_\_\_\_16 5.6.4 5.7

5.7.1 5.7.2	PrincipleApparatus	17
5.7.3	Procedure	
5.7.4 5.8	Expression of resultsDetermination of flexural strength (breaking load)	
5.6 5.8.1	Determination of flexural strength (breaking load)	
5.8.2	Determination of breaking load by flexural method	
5.9	Determination of water absorption	
5.9.1	Surface water absorption	20
5.9.2	Total water absorption	21
6	Assessment and verification of constancy of performance – AVCP	22
6.1	General	
6.2	Type testing	
6.2.1	General	
6.2.2 6.2.3	Determination of the product type	
6.2.3 6.3	Further type testing  Factory production control (FPC)	22 23
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 6.3.7	Traceability and marking  Non-complying products	
6.3. <i>1</i>	Corrective action	
6.3.9	Other test methods	
7	Designation of jointing materials	
8	Marking, labelling and packaging	25
Annex	A (informative) Sampling procedure for testing	26
<b>A.1</b>	General	26
A.2	Sampling procedure	
A.2.1	General	
A.2.2	Random sampling	26
	Representative sampling	
	General	
A.2.3.2	Sampling from a stack	26
A.2.3.3	Sampling from a consignment formed of banded or wrapped packs	27
Annex	B (normative) Classes for reaction to fire performance for air drying jointing compounds	28
Annex	C (normative) Mounting and fixing in the test according to EN 13823 (SBI test)	
C.1	Mounting and fixing of the jointing materials	29
Annex	ZA (informative) Clauses of this European Standard addressing the provisions of the EU Construction Products Regulation	
ZA.1	Scope and relevant characteristics	
ZA.2	Procedure for AVCP of jointing materials for gypsum boards	31
ZA.2.1	Systems of AVCP	31
ZA.2.2	Declaration of performance (DoP)	34

2.2.1	General	
.2.2	Content	
2.2.3	Example of DoP	
	marking and labelling	
oliograp		

## **Foreword**

This document (EN 13963:2014) 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 2015 and conflicting national standards shall be withdrawn at the latest by April 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 supersedes EN 13963:2005.

The main technical changes that have been made in this new edition of EN 13963 are the following:

- a) normative references have been updated;
- b) Commission Decision 2010/83/EU on classes of reaction to fire performance for air drying jointing compounds included in Annex B;
- c) new clause symbols, abbreviations and classification has been introduced;
- d) Annex ZA and Clause 6 have been revised to be in line with the Construction Products Regulation (CPR)
- e) 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.

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.

600

# 1 Scope

The European Standard specifies the requirements for jointing compounds and paper tapes used to fill and finish the joints formed at the edges and ends of gypsum plasterboards complying with EN 520, products from secondary processing complying with EN 14190, prefabricated gypsum plasterboard panels with a cellular paperboard core complying with EN 13915, thermal/acoustic composite panels complying with EN 13950, preformed plasterboard cornices complying with EN 14209 and gypsum boards with fibrous reinforcement complying with EN 15283-1 and EN 15283-2.

This European Standard does not cover tapes which are made from materials other than paper.

This European Standard covers the following characteristics: reaction to fire and flexural strength, to be measured according to the relevant test methods in this document.

#### 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 196-3, Methods of testing cement — Part 3: Determination of setting time and soundness

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

EN 13501-1, Fire classification of construction products and building elements — Part 1: Classification using test 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 ISO 535, Paper and board — Determination of water absorptiveness — Cobb method (ISO 535)

EN ISO 1924-2, Paper and board — Determination of tensile properties — Part 2: Constant rate of elongation method (20 mm/min) (ISO 1924-2)

ISO 565, Test sieves — Metal wire cloth, perforated metal plate and electroformed sheet — Nominal sizes of openings

# 3 Terms and definitions, symbols, abbreviations and classification

#### 3.1 Terms and definitions

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

#### 3.1.1

#### jointing system

combination of jointing compound or compounds with or without jointing tape to form a seamless joint between two gypsum boards

#### 3.1.2

#### tapeless jointing compound

compound for use without tape for jointing gypsum boards with suitable edge profiles