

Kipsplaadid. Määratlused, nõuded ja katsemeetodid

Gypsum plasterboards - Definitions, requirements
and test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 520:2005 sisaldab Euroopa standardi EN 520:2004 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 25.01.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 520:2005 consists of the English text of the European standard EN 520:2004.</p> <p>This document is endorsed on 25.01.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This European Standard specifies the characteristics and performance of gypsum plasterboards intended to be used in building construction works including those intended for secondary manufacturing operations. It includes boards designed to receive either direct surface decoration or gypsum plaster.</p>	<p>Scope:</p> <p>This European Standard specifies the characteristics and performance of gypsum plasterboards intended to be used in building construction works including those intended for secondary manufacturing operations. It includes boards designed to receive either direct surface decoration or gypsum plaster.</p>
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ICS 01.040.91, 91.100.10

Võtmesõnad:

ICS 01.040.91; 91.100.10

English version

Gypsum plasterboard

Definitions, requirements and test methods

Plaques de plâtre – Définitions, exigences et méthodes d'essai

Gipsplatten – Begriffe, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 2004-08-16.

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CEN

European Committee for Standardization
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Foreword

This document has been prepared by Technical Committee CEN/TC 241 "Gypsum and gypsum-based products", the Secretariat of which is held by AFNOR.

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 the relevant EU Directive. For relationship with this Directive, see Annex ZA.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, by February 2005 at the latest, and conflicting national standards shall be withdrawn by August 2006 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and the United Kingdom.

Introduction

Gypsum plasterboards are composed of a plaster core encased in, and firmly bonded to paper liners to form flat rectangular boards. This composition allows them properties which make gypsum plasterboards particularly suitable for use in situation where fire protection, sound and thermal insulation are required.

Gypsum plasterboards may be fixed by various methods e.g. nailing, screwing or sticking with gypsum based or other adhesives. They may also be inserted in a suspended ceiling system.

Gypsum plasterboards are selected for use according to their type, size, thickness and edge profile. The boards may be used for example to provide dry lining finishes to walls, to fixed and suspended ceilings, to partitions, or as cladding to structural columns and beams. Other uses may be for flooring and sheathing application.

Diagrams 1 and 2 show the relationship between this standard and the package of standards prepared to support the families of gypsum and ancillary products.

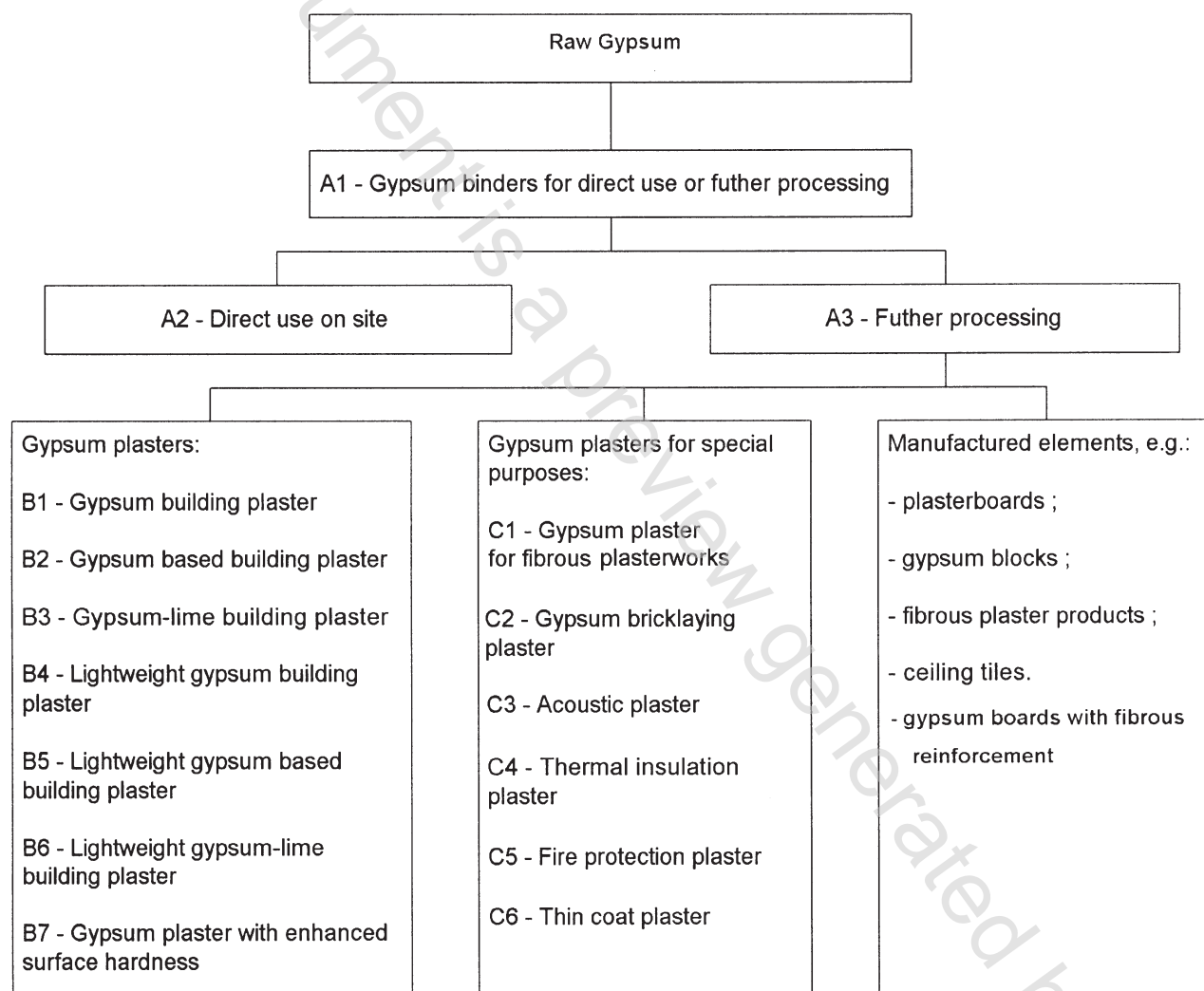


Diagram 1 — Family of gypsum products

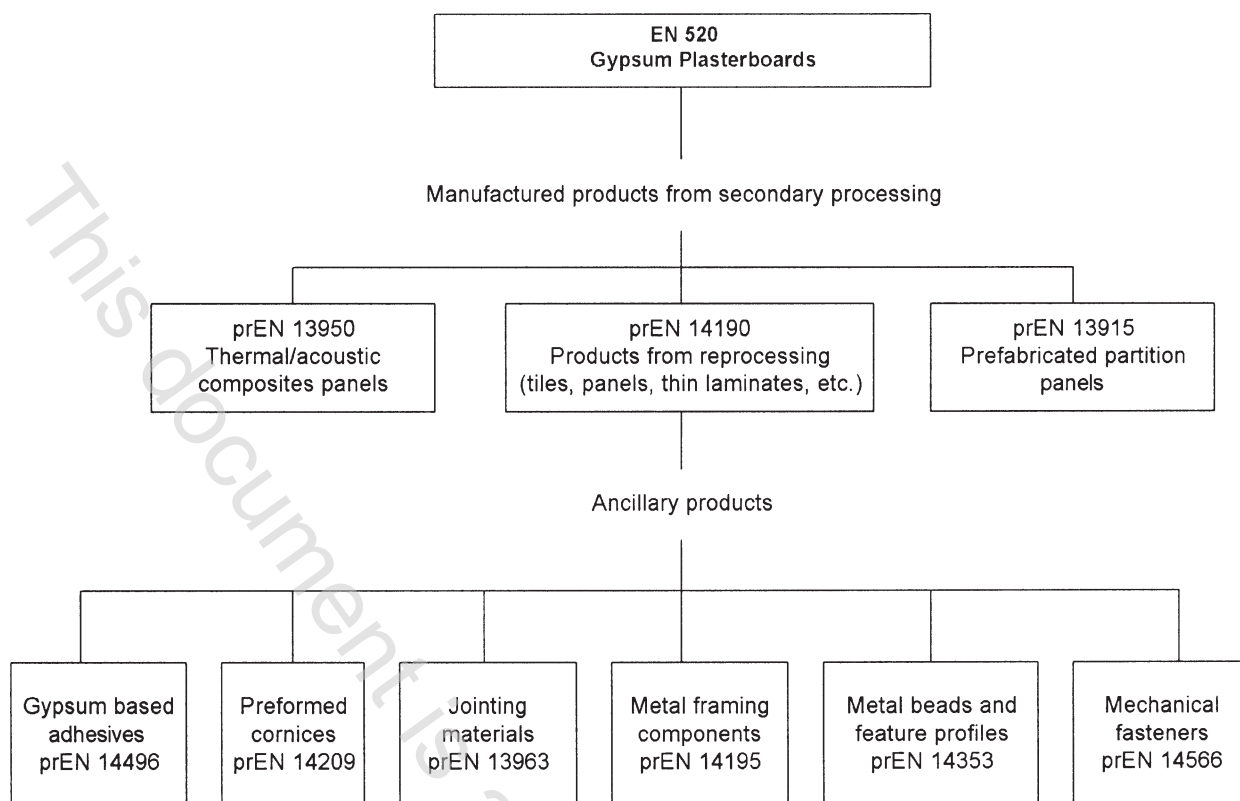


Diagram 2 — Family of ancillary products

1 Scope

This document specifies the characteristics and performance of gypsum plasterboards intended to be used in building construction works including those intended for secondary manufacturing operations. It includes boards designed to receive either direct surface decoration or gypsum plaster.

This document covers the following product performance characteristics: reaction to fire, water vapour permeability, flexural strength (breaking load), impact resistance and thermal resistance.

The following performance characteristics are linked to systems assembled with plasterboards: shear strength, fire resistance, impact resistance direct airborne sound insulation and acoustic absorption 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 Construction Industry and the reference tests for these characteristics.

It provides for the evaluation of conformity of the product to this document.

This document does not cover plasterboards, which have been subject to any secondary manufacturing operations (e.g. insulating composite panels, plasterboards with thin lamination, etc.).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 336, *Structural timber — Sizes, permitted deviations*

EN 338, *Structural timber — Strength classes*

EN 1995-1-1, *Eurocode 5 — Design of timber structures*

EN 12114, *Thermal performance of buildings — Air permeability of building components and building elements — Laboratory test method*

EN 12524, *Building materials and products — Hygrothermal properties — Tabulated design values*

EN 12664, *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, *Fire classification of construction products and building elements — Part 1: Classification using test data from reaction to fire tests*

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

EN 13823, *Reaction to fire tests for building products — Building products excluding floorings exposed to the thermal attack by a single burning item*

prEN 13963, *Jointing materials for gypsum plasterboards — Definitions, requirements and test methods*

EN 14195, *Metal framing components for gypsum plasterboard systems — Definitions, requirements and test methods*

prEN 14566, *Mechanical fasteners for gypsum plasterboard systems — Definitions, requirements and test methods*

EN ISO 140-3, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 3: Laboratory measurements of airborne sound insulation of building elements (ISO 140-3:1995).*

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

EN ISO 536, *Paper and board — Determination of grammage (ISO 536:1995).*

EN ISO 717-1, *Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation (ISO 717-1:1996).*

EN ISO 12572, *Hygrothermal performance of building materials and products — Determination of water vapour transmission properties (ISO 12572:2001).*

EN ISO 20535, *Paper and board — Determination of water absorptiveness — Cobb method (ISO 535:1991).*

ISO 7892, *Vertical building elements — Impact resistance tests — Impact bodies and general test procedures.*

3 Terms and definitions

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

3.1 gypsum plasterboard

product composed of a plaster core encased in, and firmly bonded to strong durable paper liner to form a flat rectangular board. The paper surfaces may vary according to the use of the particular type of board and the core may contain additives to impart additional properties. The longitudinal edges are paper-covered and profiled to suit the application

3.1.2

edge

paper-covered longitudinal side

3.1.3

end

side transverse to the edges, showing exposed core

3.1.4

face

surface on which the paper extends continuously to cover the edges

3.1.5

back

surface opposite to the face

3.1.6

width

shortest distance between the edges of the board

3.1.7

nominal width (w)

width stated by the producer

3.1.8

length

shortest distance between the ends of the board