

**Kipsplaadid. Määratlused, nõuded ja katsemeetodid
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Gypsum plasterboards - Definitions, requirements and test methods CONSOLIDATED TEXT

EESTI STANDARDI EESSÕNA

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<p>Käesolev Eesti standard EVS-EN 520:2005+A1:2009 sisaldab Euroopa standardi EN 520:2004+A1:2009 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 30.10.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 19.08.2009.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 520:2005+A1:2009 consists of the English text of the European standard EN 520:2004+A1:2009.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 30.10.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 19.08.2009.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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ICS 01.040.91, 91.100.10

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EUROPEAN STANDARD

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Gypsum plasterboards - Definitions, requirements and test methods

Plaques de plâtre - Définitions, spécifications et méthodes d'essai

Gipsplatten - Begriffe, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 16 August 2004 and includes Amendment 1 approved by CEN on 20 July 2009.

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Foreword

This document (EN 520:2004+A1:2009) 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of an identical text or by endorsement, at the latest by February 2010, and conflicting national standards shall be withdrawn at the latest by February 2010.

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 includes Amendment 1, approved by CEN on 2009-07-20.

This document supersedes EN 520:2004.

The start and finish of text introduced or altered by amendment is indicated in the text by tags $\boxed{A_1}$ $\boxed{A_1}$.

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 Directive(s), see informative Annex ZA, which is an integral part of this document.

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Introduction

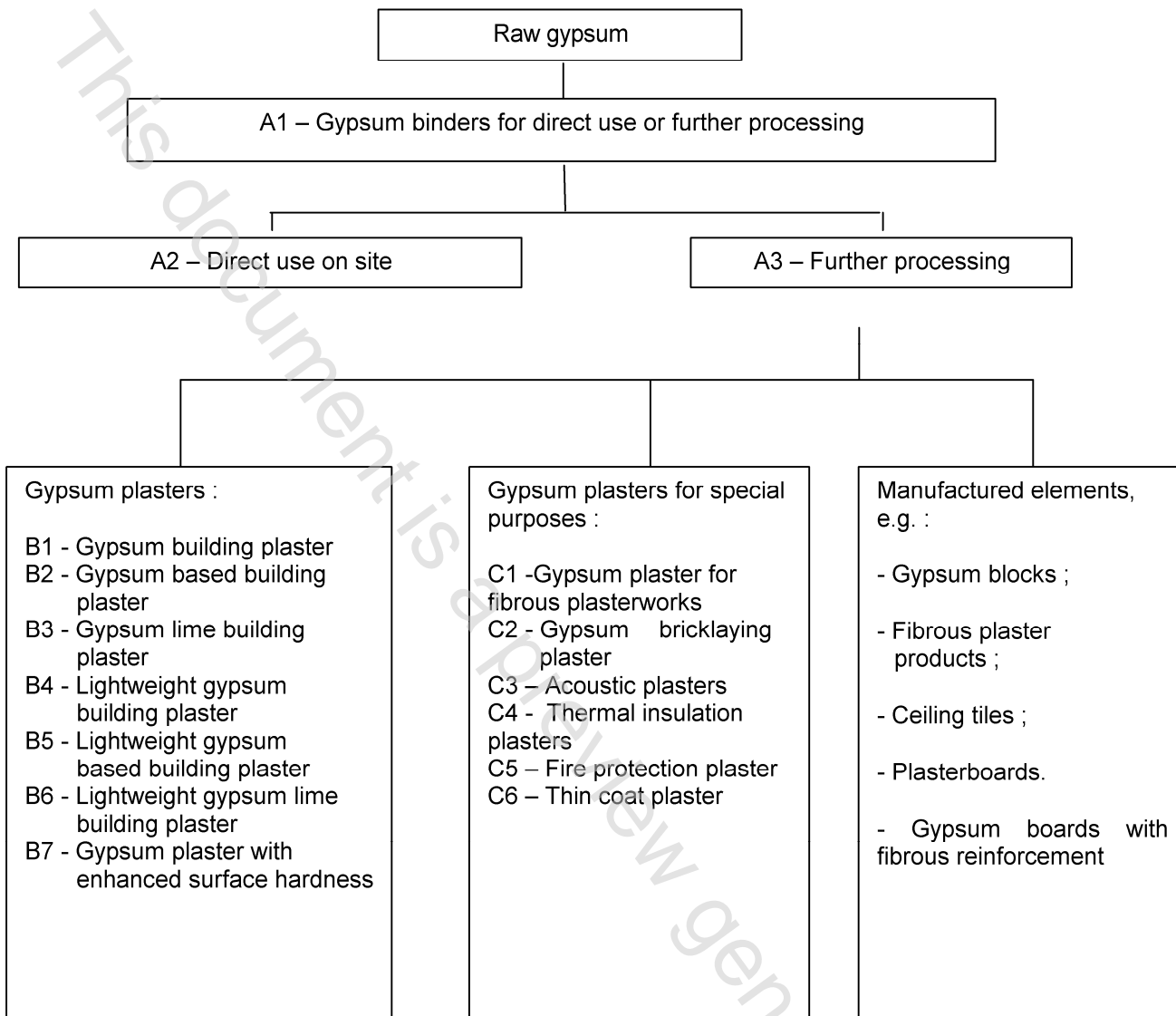
Gypsum plasterboards are composed of a plaster core encased in, and firmly bonded to paper liners to form flat rectangular boards. ^{A1} This composition allows them properties which make gypsum plasterboards particularly suitable for use in situations where fire protection, sound and thermal insulation are required. ^{A1}

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.

A1



A1

Diagram 1 — Family of gypsum products

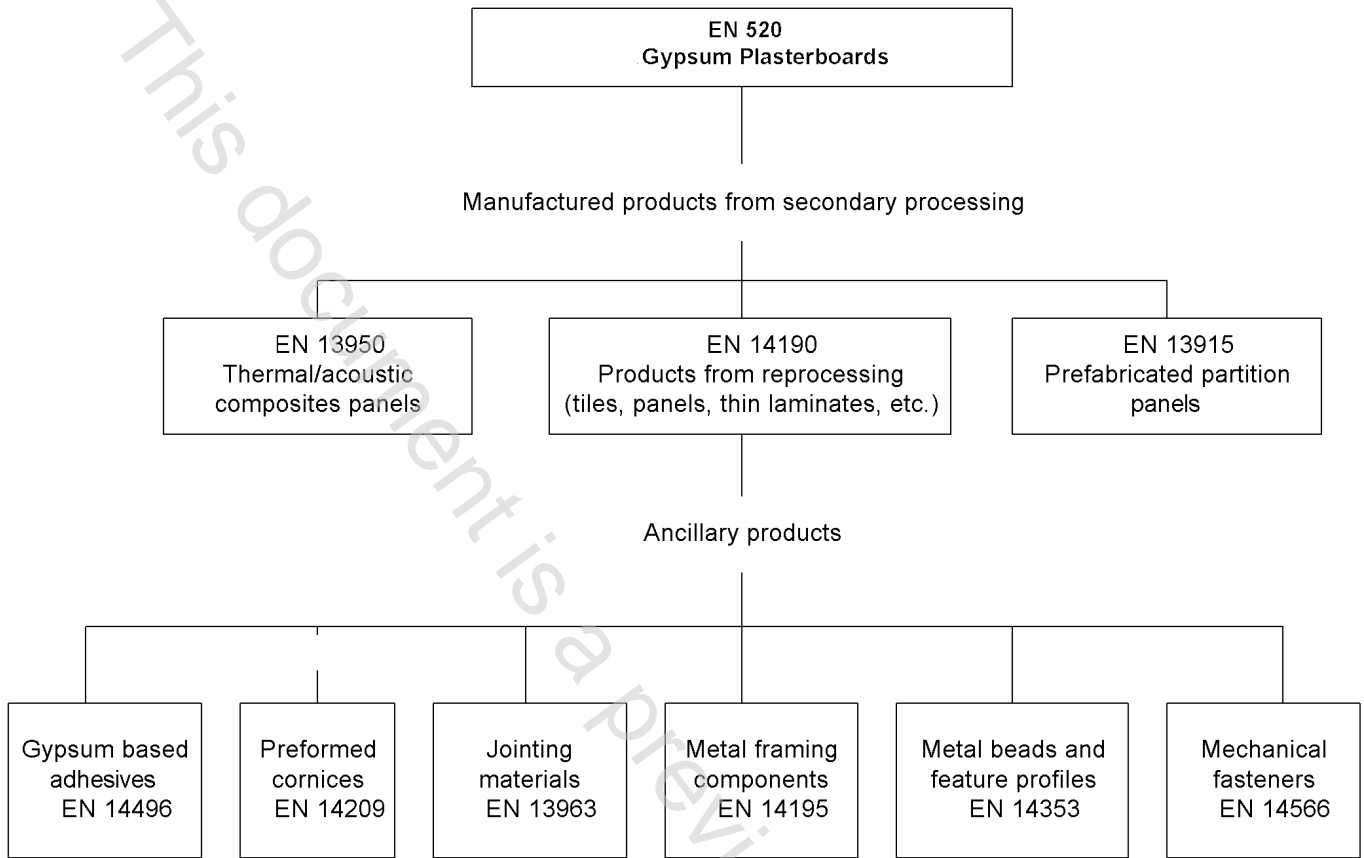


Diagram 2 — Family of ancillary products

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 \square_{A1} , \square_{A1} 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*

\square_{A1} EN 13963 \square_{A1} , *Jointing materials for gypsum plasterboards — Definitions, requirements and test methods*

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

EN 14566 ^{A1}, *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