# Lisatöötlusel saadavad kipsplaadist tooted. Määratlused, nõuded ja katsemeetodid

Gypsum plasterboard products from reprocessing - Definitions, requirements and test methods



#### **EESTI STANDARDI EESSÕNA**

#### **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN
14190:2005 sisaldab Euroopa standardi
EN 14190:2005 ingliskeelset teksti.

Käesolev dokument on jõustatud 15.07.2005 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 14190:2005 consists of the English text of the European standard EN 14190:2005.

This document is endorsed on 15.07.2005 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European Standard specifies the characteristics and performance of products which have been produced from gypsum plasterboards manufactured according to EN 520 by reprocessing.

#### Scope:

This European Standard specifies the characteristics and performance of products which have been produced from gypsum plasterboards manufactured according to EN 520 by reprocessing.

ICS 01.040.91, 91.100.10

**Võtmesõnad:** ceilings, coatings, conformity tests, flame propagation, lathwork boards, planks, plaster cardboards, plasterboard, properties, shear strength, specification (approval), specifications, stability, strength of materials, surface spread of flame, testing, wallboard

### EUROPEAN STANDARD NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

EN 14190

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ICS 91.100.10; 01.040.91

#### English version

# Gypsum plasterboard products from reprocessing - Definitions, requirements and test methods

Produits de transformation secondaire de plaques de plâtre - Définitions, spécifications et méthodes d'essai

Gipsplatten - Produkte aus der Weiterverarbeitung -Begriffe, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 1 July 2004.

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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 Central Secretariat has the same status as the official versions.

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



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

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#### **Foreword**

This European Standard (EN 14190:2005) 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 December 2005, and conflicting national standards shall be withdrawn at the latest by December 2005.

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

#### Introduction

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.

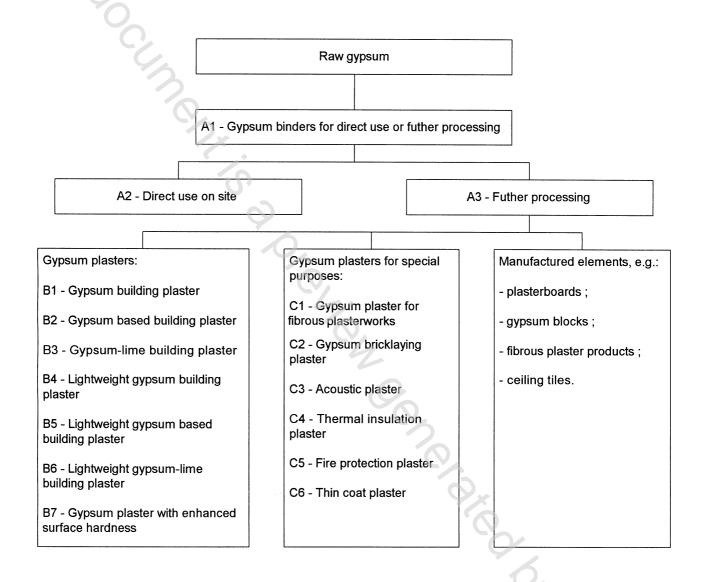


Diagram 1 - Family of gypsum products

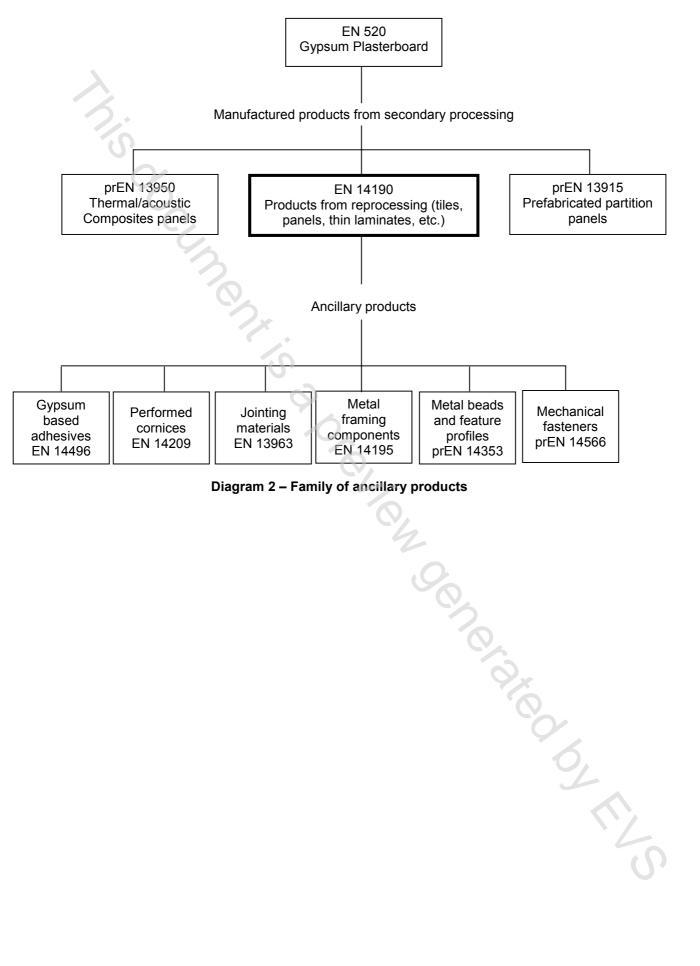


Diagram 2 - Family of ancillary products

#### 1 Scope

This European Standard specifies the characteristics and performance of products which have been produced from gypsum plasterboards manufactured according to EN 520 by reprocessing. Reprocessing may include cutting, perforating, edge profiling, decorating and laminating membranes of other materials for functional or decorative purposes, attaching fixings including supports e.g. for partitions. A fuller list of reprocessing operations is given in Annex B.

Gypsum plasterboards subject to reprocessing operations may be suitable for extended applications such as suspended ceilings providing sound absorption, flooring, self decorative finishes, low emissivity characteristics, moisture vapour control and X-ray protection.

The products are intended for use in wall, ceiling and floor applications, where they may be fixed direct to the background, or they are used in systems assembled in conjunction with the structure to form separate or suspended linings. The products offer a wide range of aesthetic solutions of modular or non-modular design.

This standard covers the following product performance characteristics: reaction to fire, water vapour permeability, stability in case of ceiling elements, flexural strength (breaking load), impact resistance, thermal resistance.

The following performance characteristics are linked to systems assembled with products from reprocessing: shear strength, 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 European standard also covers 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 standard.

This standard does not cover gypsum plasterboard thermal/acoustic insulation composite panels and prefabricated gypsum wallboard panels according to prEN 13950 and prEN 13915, respectively.

#### 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 520:2003, Gypsum plasterboards – Definitions, requirements and test methods

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

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 14190:2005 (E)

EN ISO 140-6, Acoustics – Measurement of sound insulation in buildings and of building elements – Part 6: Laboratory measurements of impact sound insulation of floors (ISO 140-6:1998)

EN ISO 140-7, Acoustics – Measurement of sound insulation in buildings and of building elements – Part 7: Field measurements of impact sound insulation of floors (ISO 140-7:1998)

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

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 6946, Building components and building elements – Thermal resistance and thermal transmittance – Calculation method (ISO 6946:1996)

EN ISO 9001:2000, Quality management systems - Requirements (ISO 9001:2000)

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

ISO 7892, Vertical building elements – Impact resistance tests – Impact bodies and general test procedures

IEC 61331-1, Protective devices against diagnostic medical X-radiation – Part 1: Determination of attenuation properties of materials (IEC 61331-1:1994)

#### 3 Terms and definitions

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

#### 3.1

#### face

surface intended to be exposed

#### 3.2

#### back

surface intended to be concealed

#### 3.3

#### perforations

holes of constant or varying shape and size

#### 3.4

#### thin laminations

material applied to one or more surfaces to impart decoration or functional properties

#### 3.5

#### floor elements

construction of 2 or more plasterboards stuck together to provide profiled edges. Suitable single boards of adequate thickness and edge configuration may also comply. Floor elements may include thermal and impact sound insulation

#### 3 6

#### foldable elements

elements formed from plasterboards, that have previously been milled to provide inclined channels through their thickness, to allow them to be folded.