

Kiulisest kipsplaadist tooted. Määratlused, nõuded ja katsemeetodid

Fibrous gypsum plaster casts - Definitions,
requirements and test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 13815:2006 sisaldab Euroopa standardi EN 13815:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 27.10.2006 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 13815:2006 consists of the English text of the European standard EN 13815:2006.</p> <p>This document is endorsed on 27.10.2006 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>
--	---

<p>Käsitlusala:</p> <p>This European Standard specifies the characteristics and performance requirements for fibrous gypsum plaster castsections, rigid sheets, rigid tiles - made by various techniques in factories or workshops.</p>	<p>Scope:</p> <p>This European Standard specifies the characteristics and performance requirements for fibrous gypsum plaster castsections, rigid sheets, rigid tiles - made by various techniques in factories or workshops.</p>
--	--

ICS 91.100.10

Võtmesõnad:

ICS 91.100.10

English Version

Fibrous gypsum plaster casts - Definitions, requirements and test methods

Produits en staff - Définitions, prescriptions et méthodes d'essai

Formteile aus faserverstärktem Gips - Begriffe, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 19 June 2006.

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 Central Secretariat 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 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, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Contents

Page

Foreword.....	4
Introduction	5
1 Scope	6
2 Normative references	7
3.1 General terms and definitions	8
3.2 Technical terms and definitions	8
4 Classifications.....	12
4.1 Categories of production	12
4.2 Product ranges.....	12
5 Requirements	13
5.1 Fire behaviour	13
5.2 Dangerous substances	13
5.3 Impact resistance.....	13
5.4 Protection against noise	13
5.5 Energy economy and heat retention.....	14
5.6 Constituents	14
5.7 Appearances.....	19
5.8 Thickness of the prime layer (fibrous plaster firstings)	20
5.9 Handling framework	20
5.10 Resistance to impact by a hard steel ball and cohesion	20
5.11 Moisture content	20
5.12 pH	21
5.13 Surface hardness.....	21
5.14 Interior architectural casts or technical function casts - Additional requirements	21
5.15 Units - Additional requirements	22
6 Test methods.....	24
6.1 Sampling	24
6.2 Conditioning of samples	24
6.3 Checking of the moulding definition of the face	24
6.4 Prime layer thickness checking	26
6.5 Checking the resistance to impact by a hard steel ball and the cohesion	27
6.6 Moisture content	29
6.7 pH measurement.....	29
6.8 Surface hardness measurement	30
6.9 Measurement of the thickness of interior architectural or technical function casts	31
6.10 Unit length measurement.....	32
6.11 Unit width measurement	32
6.12 Unit thickness measurement.....	33
6.13 Checking of unit angle squareness	34
6.14 Checking of unit face flatness	35
6.15 Determination of unit mass and checking of mass per unit area.....	38
7 Evaluation of conformity.....	38
7.1 General.....	38
7.2 Type testing	39
7.3 Factory production control (FPC)	41
8 Designation of the products	42
8.1 Designation of the interior architectural casts and technical function casts	42
8.2 Designation of the units	43
9 Marking, labelling and packaging	43

Annex A (informative) Sampling procedure for testing	44
Annex B (normative) Design values of thermal conductivity of gypsum plaster	46
Annex C (normative) Factory Production Control (FPC)	47
Annex ZA (informative) Clauses of this European Standard addressing essential requirements or other provisions of EU Directives	52
ZA.1 Scope and characteristics concerned	52
Product : fibrous gypsum plaster casts	53
Intended uses : see clause 1	53
ZA.2 Attestation and declaration of conformity of fibrous gypsum plaster casts	54
ZA.2.1 General	54
ZA.3 CE marking and labelling	58
Bibliography	60

Foreword

This document (EN 13815:2006) 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 2007, and conflicting national standards shall be withdrawn at the latest by May 2008.

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.

This document replaces no existing European Standard.

This European Standard includes:

- an informative annex A concerning sampling procedure for testing;
- an normative annex B on the thermal conductivity of the gypsum plaster;
- an normative annex C concerning factory production control ;
- an informative annex D illustrating the scope of this standard with regard to the classification of the categories of production of the fibrous gypsum plaster casts and to the intended uses;
- an informative annex ZA : providing information for regularity marking.

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

Introduction

This European Standard applies to fibrous gypsum plaster construction products, obtained by thin casting of a specific reinforced plaster and intended to be used in fibrous gypsum plaster structures.

The fibrous gypsum plaster structures are made by assembling these casts together and fastening them by sealed fixing or screwing to the substrate. They are then sealed and pointed to form continuous surfaces without any visible joint.

Fibrous gypsum plaster structures are suitable for finishing with direct surface decoration (e.g. paints).

The diagram below shows the family of gypsum products.

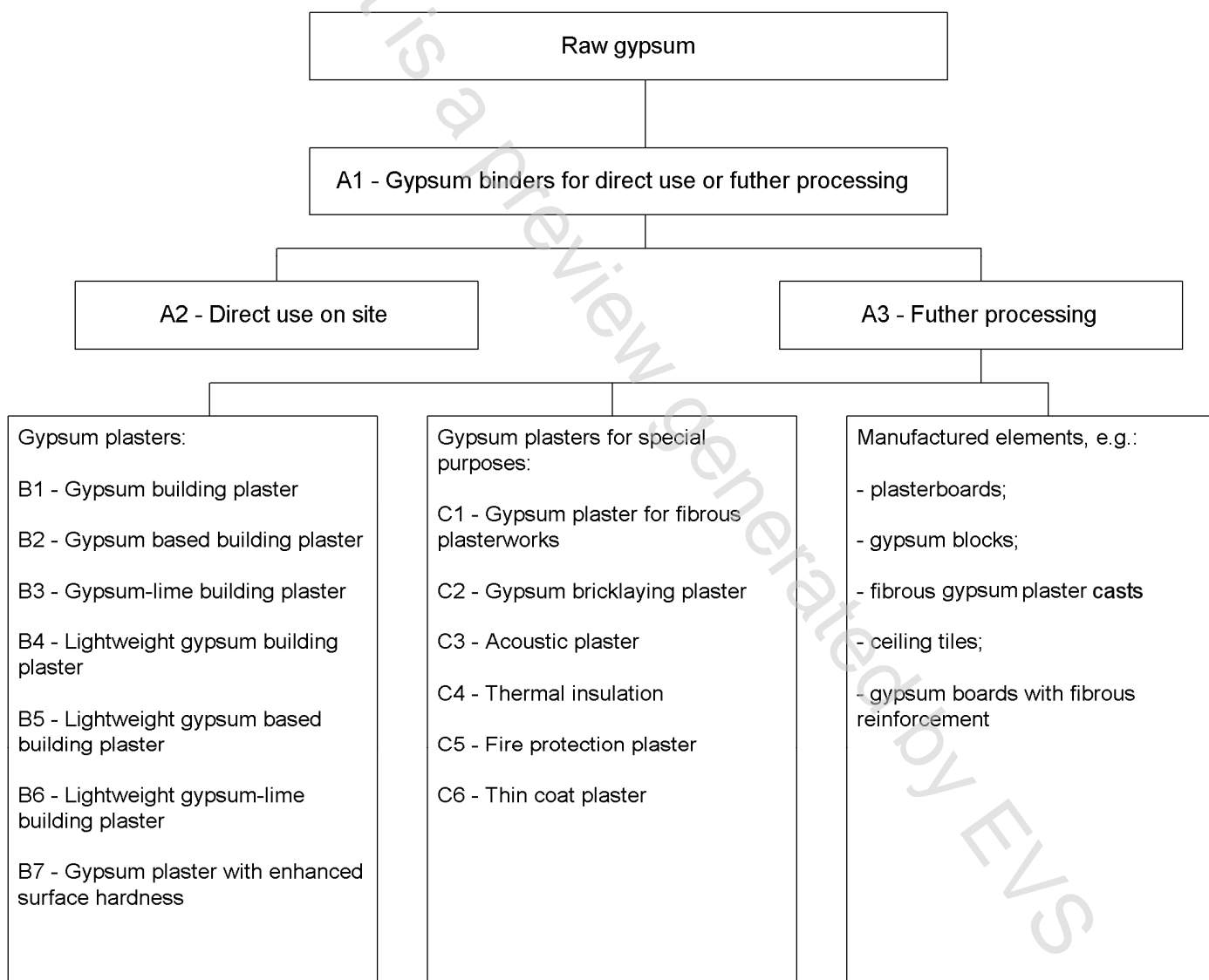


Diagram – Family of gypsum products

1 Scope

This European Standard specifies the characteristics and performance requirements for fibrous gypsum plaster cast-sections, rigid sheets, rigid tiles - made by various techniques in factories or workshops.

This European Standard is applicable to:

- conventional series produced products;
- series produced products with varying properties ;
- individual (and non-series) produced products, insofar required to be CE marked.

See 4.1 and annex D concerning the classification of the fibrous gypsum plaster casts.

This European Standard covers the following performance characteristics of the fibrous gypsum plaster casts : reaction to fire, thermal resistance, as well as resistance to impact by a hard steel ball and cohesion.

The following performance characteristics are linked to systems assembled with fibrous gypsum plaster casts : fire resistance, impact resistance, direct airborne sound insulation, acoustic absorption to be measured according to the corresponding European test methods. If required, tests have to be done on assembled systems simulating the end use conditions.

This European Standard defines the reference test methods for the technical specifications.

This European Standard also covers additional technical characteristics of fibrous gypsum plaster casts that are of importance for use and acceptance of the products by the building industry and the reference tests for these characteristics.

It provides for assessment of conformity of the products to this standard.

This standard does not apply to:

- i) fibre reinforced gypsum sheet products (see pr EN 15283);
- ii) gypsum elements for suspended ceilings (see EN 14246);
- iii) solid casts;
- iv) run fibre reinforced products;
- v) plaster based stucco casts, carton pierre decors, resin decors;
- vi) moulds, models and mock-ups made of fibrous gypsum plaster;
- vii) fibrous gypsum plaster casts that, by nature, are not intended to be fastened in position;
- viii) fibrous gypsum plaster casts for sets (theatre, cinema, TV);
- ix) fibrous gypsum plaster casts and decors intended to be installed directly on existing partitions, walls and ceilings, for purely decorative applications.

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 635-3:1995, *Plywood — Classification by surface appearance. — Part 3: Softwood.*

EN 1611-1:1999, *Sawn timber — Appearance grading of softwoods — Part 1: European spruces, firs, pines and Douglas firs.*

EN 10327, *Continuously hot-dip coated strip and sheet of low carbon steels for cold forming — Technical delivery conditions.*

EN 10244-2, *Steel wire and wire products — Non-ferrous metallic coatings on steel wire — Part 2: Zinc or zinc alloy coatings.*

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

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 20140-9, *Acoustics — Measurement of sound insulation in buildings and of building elements — Part 9: Laboratory measurements of room-to-room airborne sound insulation of a suspended ceiling with a plenum above it.*

EN 13279-1, *Gypsum binders and gypsum plasters — Part 1: Definitions and requirements*

EN 13658-1, *Metal lath and beads — Definitions, requirements and test methods — Part 1: Internal plastering.*

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 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 10456, *Building materials and products — Procedures for determining declared and design thermal values (ISO 10456:1999).*

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