

Kipsplokid. Määratlused, nõuded ja katsemeetodid

Gypsum blocks - Definitions, requirements and test methods

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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Gypsum blocks - Definitions, requirements and test methods

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

Gips-Wandbauplatten - Begriffe, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 2 January 2011.

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Foreword

This document (EN 12859:2011) 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of an identical text or by endorsement, at the latest by August 2011, and conflicting national standards shall be withdrawn at the latest by August 2011.

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 12859:2008.

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 European Standard includes:

- A normative annex concerning sampling for independent test;
- An informative annex recommending requirements and test method for measuring surface hardness.

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, 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

Diagram 1 shows the relationship between this standard and the package of standards prepared to support the family of gypsum products.

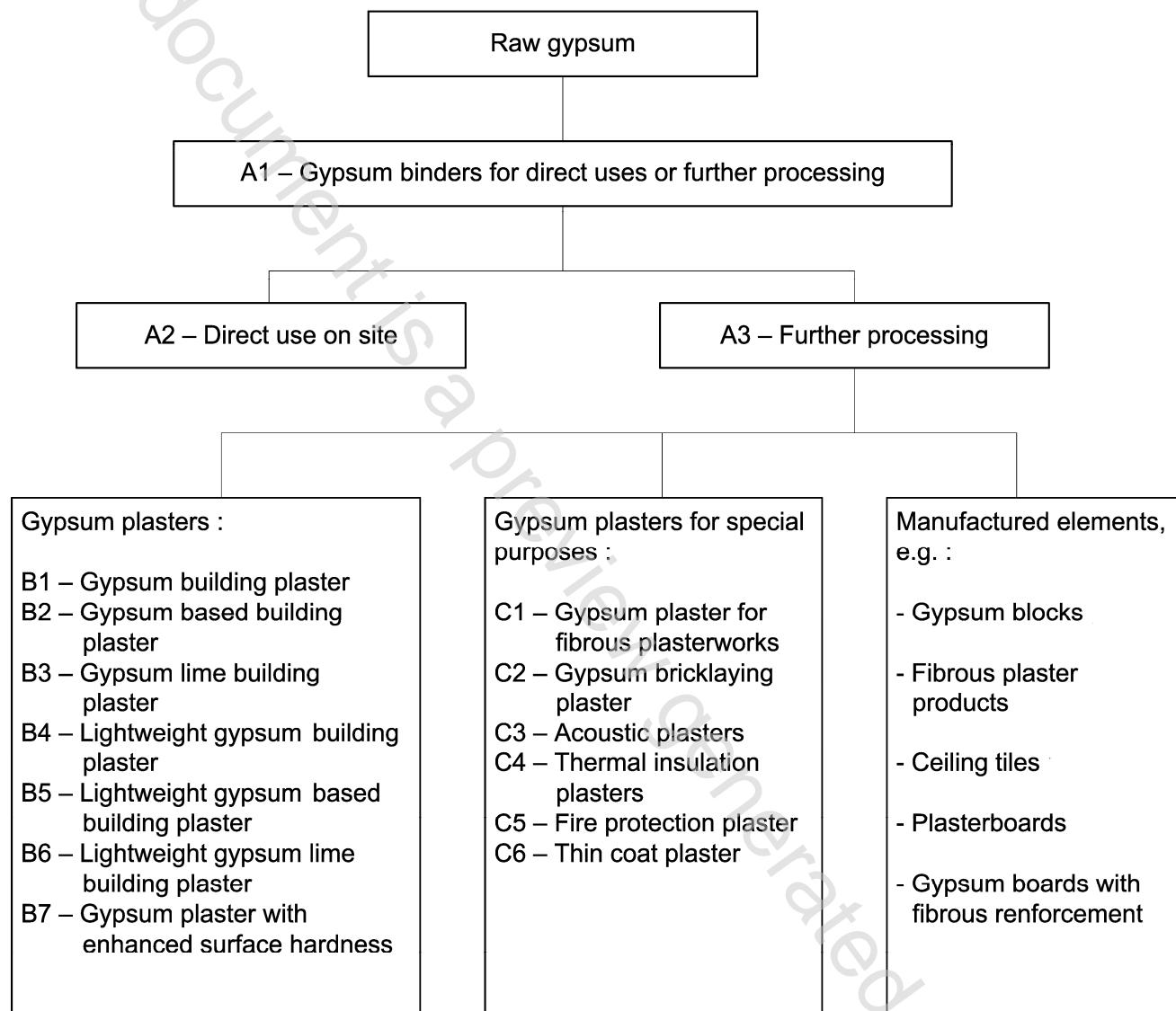


Figure 1 — Family of gypsum binders and gypsum products

1 Scope

This European Standard specifies the characteristics and performance of gypsum blocks with smooth faces for which the main intended uses are construction of non-load bearing partitions or independent wall linings and the fire protection of columns, lift shafts, shafts for services, etc. Gypsum blocks are not used to build ceilings.

It covers the following performance characteristics related to the essential requirements:

- reaction to fire;
- resistance to fire;
- direct airborne sound insulation;
- release of dangerous substances;

to be measured according to the corresponding European test methods, as well as:

- thermal resistance

to be calculated from the thermal conductivity values given in 4.3.2.

It describes the reference tests for technical specifications.

This European Standard covers also additional technical characteristics that are of importance for the use and acceptance of the product by the construction industry:

- convenience classes for density;
- convenience classes for pH.

It provides for the evaluation of conformity of the product to this European Standard.

This European Standard does not cover gypsum blocks of thickness less than 50 mm or gypsum storey height units.

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 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using 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 ISO 717-1, *Acoustics — Rating of sound insulation in buildings and of building elements — Part 1: Airborne sound insulation (ISO 717-1:1996)¹⁾*

1) This reference is impacted by the stand-alone amendment EN ISO 717-1:1996/A1:2006.

EN ISO 6946:2007, *Building components and building elements — Thermal resistance and thermal transmittance — Calculation method (ISO 6946:2007)*

EN ISO 10140-3, *Acoustics — Laboratory measurement of sound insulation of building elements — Part 3: Measurement of impact sound insulation (ISO 10140-3:2010)*

EN ISO 10456:2007, *Building materials and products — Hygrothermal properties — Tabulated design values and procedures for determining declared and design thermal values (ISO 10456:2007)*

3 Terms, definitions and symbols

3.1 Terms and definitions

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

3.1.1

gypsum block

factory-made building element that is produced from calcium sulphate and water, that may incorporate fibres, fillers, aggregates and other additives as far as they are not classified as dangerous substances in accordance with European regulations, and that may be coloured by pigmentation in accordance with the provisions of this standard

NOTE The gypsum block is a rectangular parallelepiped with tongues and grooves on at least two of their opposite edges.

3.1.2

solid gypsum block

gypsum block manufactured without cavities

3.1.3

cavity gypsum block

gypsum block which incorporates preformed cavities

3.1.4

preformed cavity

formed cavity parallel to the faces which may or may not pass completely through the block and which may run parallel with the height or the length

NOTE See example on Figure 2.

3.1.5

face

plain and smooth surface intended to provide the finish of a partition

NOTE See Figure 2.

3.1.6

edge

extreme side of the gypsum block having tongues and grooves

NOTE See Figure 2.

3.1.7

thickness

distance between the two faces of a gypsum block

NOTE See Figure 2.