



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 12859:2008

Gypsum blocks - Definitions, requirements and test methods

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

Gips-Wandbauplatten - Begriffe,
Anforderungen und Prüfverfahren

04/2008



National Foreword

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English Version

Gypsum blocks - Definitions, requirements and test methods

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

Gips-Wandbauplatten - Begriffe, Anforderungen und
Prüfverfahren

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Foreword

This document (EN 12859:2008) 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of an identical text or by endorsement, at the latest by October 2008, and conflicting national standards shall be withdrawn at the latest by October 2008.

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 12859:2001.

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 89/106/EC.

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

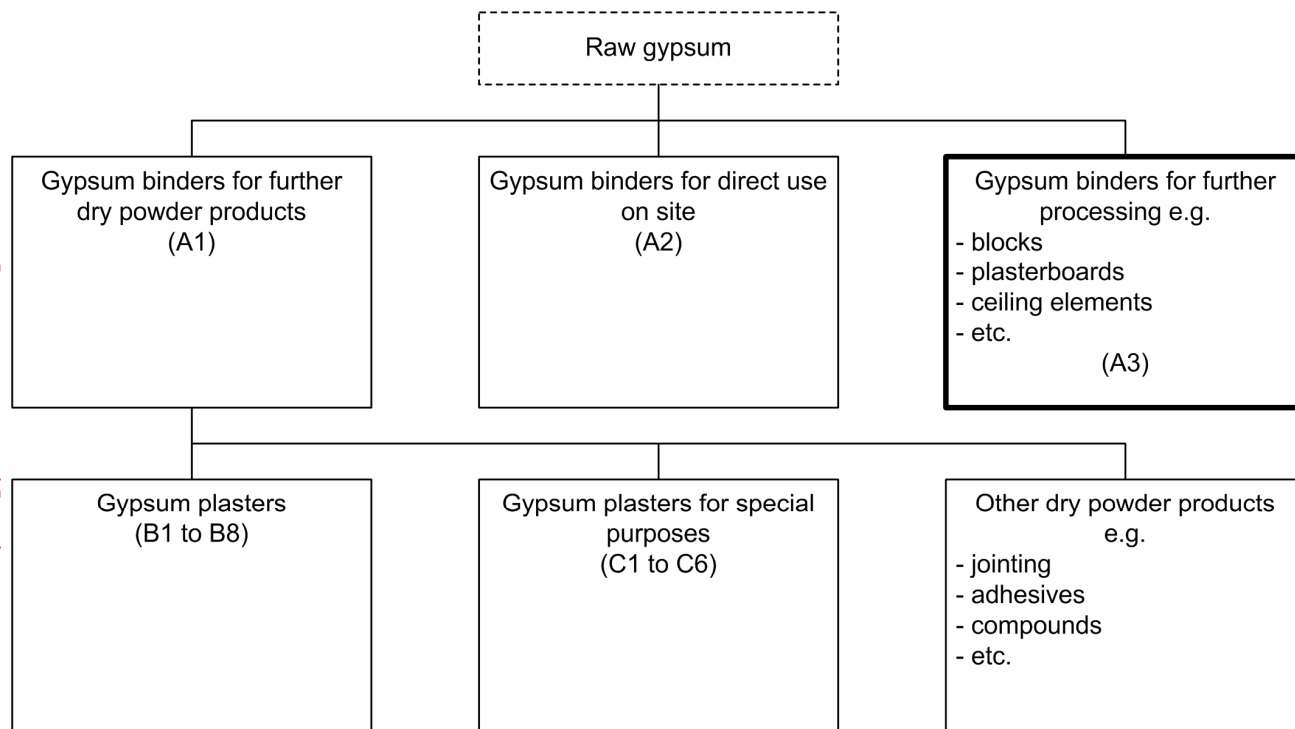
This European Standard includes:

- normative annex concerning sampling for independent test;
- informative annex recommending requirements and test method for measuring surface hardness;
- informative annex for a visual identification by coloration of gypsum blocks.

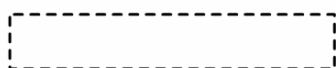
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Introduction

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



Key



products not covered by any European Standard



products covered by a European Standard



products covered by this European Standard

Diagram 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, etc. The 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 also covers additional technical characteristics that are of importance for the use and acceptance of the product by the construction industry:

- convenience class for density;
- convenience class for pH;
- surface hardness.

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 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 717-1, *Acoustics - Rating of sound insulation in buildings and of building elements - Part 1: Airborne sound insulation*

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

EN ISO 10456, *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 produced from calcium sulphate and water that may incorporate fibres, fillers, aggregates and other additives as long as they are not classified as dangerous substances in accordance with European regulations

NOTE 1 The gypsum block is a rectangular parallel piped, with tongues and grooves on at least two of their opposite edges.

NOTE 2 It may be coloured by pigmentation

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. It may run parallel with the height or the length (see Figure 1)

3.1.5

face

plain and smooth surface intended to provide the finish of a partition (see Figure 1)

3.1.6

edge

extreme side of the gypsum block having tongues and grooves (see Figure 1)

3.1.7

thickness

distance between the two faces of a gypsum block (see Figure 1)