Gypsum binders and gypsum plasters

Part 1: Definitions and requirements

ICS 01.040.91; 91.100.10



National foreword

This British Standard is the UK implementation of EN 13279-1:2008. It supersedes BS EN 13279-1:2005 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/544/1, Gypsum plasters, cast gypsum and ancillaries.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

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Gypsum binders and gypsum plasters - Part 1: Definitions and requirements

Liants-plâtres et enduits à base de plâtre pour le bâtiment -Partie 1: Définitions et exigences Gipsbinder und Gipstrockenmörtel - Teil 1: Begriffe und Anforderungen

This European Standard was approved by CEN on 11 July 2008.

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Foreword

This document (EN 13279-1:2008) has been prepared by Technical Committee CEN/CENELEC/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of an identical text or by endorsement, at the latest by February 2009, and conflicting national standards shall be withdrawn at the latest by February 2009.

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 13279-1:2005.

This standard differs from EN 13279-1:2005 as follows:

- a) definitions 3.1, 3.2, 3.9, 3.20 revised;
- b) definition and requirements for finishing products included.

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 on gypsum binders and gypsum plasters consists of two parts:

- Part 1: Definitions and requirements;
- Part 2: Test methods.

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, 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 the United Kingdom.

Introduction

Figure 1 shows the family of gypsum binders and gypsum plasters (see also Table 1):

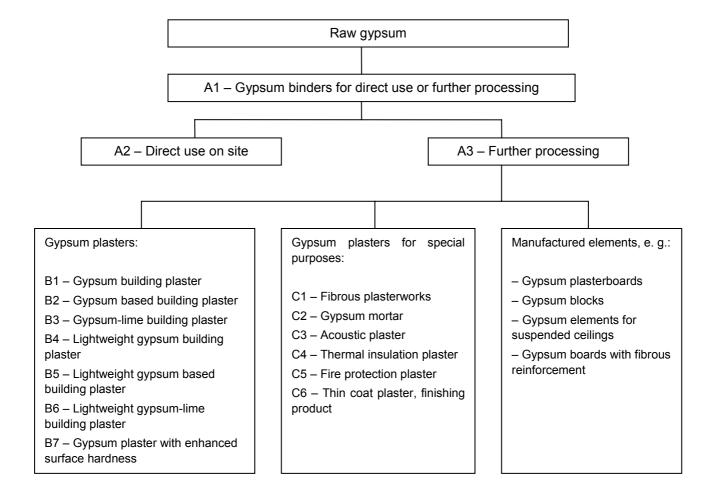


Figure 1 — Family of gypsum binders and gypsum plasters

1 Scope

This European Standard specifies the characteristics and performance of powder products based on gypsum binder for building purposes. This includes premixed gypsum building plasters for plastering of walls and ceilings inside buildings where they are applied as a finishing material which can be decorated. These products are specially formulated to meet their application requirements by the use of additives/admixtures, aggregates and other binders. Gypsum and gypsum based building plasters for manual and mechanical applications are included.

This European Standard also applies to gypsum binders both for direct use on site and for further processing into gypsum blocks, gypsum plasterboards, gypsum boards with fibrous reinforcement, gypsum fibrous plasterwork and gypsum ceiling elements. Gypsum mortar for internal not load bearing partitions not exposed to water is also included.

Calcium sulfate used as binder for floor screeds is not covered by this European Standard.

This European Standard defines the reference tests for technical characteristics and provides for the evaluation of conformity of the products covered by this European Standard.

Building lime, as calcium hydroxide, can be used as an additional binder together with gypsum binder. If gypsum binder is the principle active binding component in a plaster then this plaster is covered by this European Standard. If building lime is the principle active binding component in a plaster then the plaster is covered by EN 998-1.

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 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 13279-2:2004, Gypsum binders and gypsum plasters — Part 2: Test methods

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

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

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

ISO 3049, Gypsum plasters — Determination of physical properties of powder

3 Terms and definitions

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

3.1

gypsum binder

binder consisting of calcium sulfate in its various hydration phases, for example hemihydrate (CaSO4 . 0,5 H2O) and anhydrite (CaSO4)

NOTE 1 Gypsum binder may be obtained by calcination of calcium sulfate dihydrate (CaSO4 . 2H2O).

NOTE 2 When mixed with water, gypsum binder is used to hold solid particles together in a coherent mass by a setting process.

3.2

gypsum plaster (premixed gypsum building plaster)

all kinds of gypsum building plaster, gypsum based building plaster and gypsum-lime building plaster used in buildings

3.3

gypsum building plaster

gypsum plaster consisting of at least 50 % calcium sulfate as the principle active binding component and not more than 5 % lime (calcium hydroxide)

NOTE Additives and aggregates may be added by the manufacturer.

3.4

gypsum based building plaster

gypsum plaster consisting of less than 50 % calcium sulfate as the principle active binding component and not more than 5 % lime (calcium hydroxide)

NOTE Additives and aggregates may be added by the manufacturer.

3.5

gypsum-lime plaster

gypsum building plaster according to 3.3 or gypsum based building plaster according to 3.4 with more than 5 % lime (calcium hydroxide)

NOTE Additives and aggregates may be added by the manufacturer.

3.6

lightweight gypsum building plaster

gypsum plasters in accordance with 3.3, 3.4 and 3.5 that incorporate either lightweight inorganic aggregates, such as expanded perlite or vermiculite, or lightweight organic aggregates

NOTE Additives and aggregates may be added by the manufacturer.

3.7

gypsum building plaster for plasterwork with enhanced surface hardness

gypsum plaster specially formulated to satisfy requirements for plasterwork with enhanced surface hardness

3.8

gypsum plaster for fibrous plasterwork

specially manufactured plaster for production and assembly of fibrous gypsum casts

3.9

gypsum mortar

specially formulated plaster used for production of gypsum mortar to assemble bricks for non load bearing walls and partitions not exposed to water

EN 13279-1:2008 (E)

3.10

gypsum acoustic plaster

specially manufactured plaster for sound absorption purposes

3.11

gypsum thermal insulation plaster

specially manufactured plaster for thermal insulation purposes

3.12

gypsum fire protection plaster

specially manufactured plaster for fire exposed situations

3.13

gypsum thin coat plaster

specially manufactured plaster usually applied to thicknesses of 3 mm to 6 mm

3.14

additives and admixtures

materials (not aggregates or binders), such as fillers, fibres, pigments, building lime (< 5 %), retarders, air entraining, water retaining and plasticizing agents added to gypsum plaster to improve its properties or to achieve particular properties

3.15

aggregates

natural, synthetic or recycled materials suitable for use in buildings, e.g. lightweight aggregates such as perlite or vermiculite or aggregates such as siliceous sand or calcareous crushed stone sand

3.16

lightweight aggregates

aggregates with a bulk density lower than 800 kg/m³.

3.17

manual gypsum plaster

gypsum plaster formulated for manual application, batch mixed with water and applied manually to the background

NOTE Some plasters are mixed to form a paste, others are mixed to form a fluid consistency.

3.18

projection gypsum plaster

gypsum plaster formulated for mechanical application, mixed with water to the required consistency and applied by projection machine to the background

3 19

one coat plaster system

gypsum plaster applied in one coat which fulfils all the functions of an undercoat and a final coat

3 20

multi-coat plaster system

plaster system requiring at least two layers of plaster including final coat

3.21

undercoat

lower plaster layer(s) of a plastering system which needs a final coat

3.22

final coat

upper (last) layer in a multi-coat plastering system

3.23

finishing product

gypsum finishing compound for final application with thicknesses of 0,1 mm to 3,0 mm, to obtain a smooth surface

4 Types of gypsum binders and gypsum plasters

The designation of the gypsum binders and gypsum plasters shall be in accordance with Table 1.

Table 1 — Types of gypsum binders and gypsum plasters

	Designation					
Gyp	Gypsum binders e.g.:					
_	gypsum binders for direct use or further processing (dry powder products);	A1				
_	gypsum binders for direct use on site;	A2				
	gypsum binders for further processing (e.g. for gypsum blocks, gypsum plasterboards, gypsum elements for suspended ceilings, gypsum boards with fibrous reinforcement).	А3				
Gyp	sum plaster:	В				
_	gypsum building plaster;	B1				
_	gypsum based building plaster;	B2				
_	gypsum-lime building plaster;	В3				
_	lightweight gypsum building plaster;	B4				
_	lightweight gypsum based building plaster;	B5				
_	lightweight gypsum-lime building plaster;	В6				
_	gypsum plaster for plasterwork with enhanced surface hardness.	В7				
Gyp	sum plaster for special purposes:	С				
_	gypsum plaster for fibrous plasterwork;	C1				
_	gypsum mortar;	C2				
_	acoustic plaster;	C3				
_	thermal insulation plaster;	C4				
_	fire protection plaster;	C5				
	thin coat plaster, finishing product;	C6				
	finishing product.	C7				

5 Requirements

5.1 Requirements linked to the end use conditions

5.1.1 Reaction to fire

Gypsum binders and gypsum plasters are classified as reaction to fire Class A1 (no contribution to the development of a fire) without testing, when they contain less than 1 % by weight or volume (whichever is the more onerous) of organic material.

NOTE See the Commission Decision 96/603/EC as amended.

If the products contain 1 % or more by weight or volume of organic material, they shall be tested and then classified in accordance with EN 13501-1.

If the determination of organic material is by volume, the method of determination of non-compacted bulk density given in ISO 3049 shall be used.

5.1.2 Fire resistance

NOTE Fire resistance is a characteristic dependent on an assembled system and not of the product in isolation.

In end use conditions, gypsum and gypsum based building plasters provide specific levels of fire resistance. Where relevant, they shall be tested and then classified in accordance with EN 13501-2.

5.1.3 Acoustic performance

5.1.3.1 Direct airborne sound insulation

NOTE Direct airborne sound insulation is a characteristic dependent on an assembled system and not of the product in isolation.

When required, the direct airborne sound insulation of an installed system including gypsum plaster and/or binder shall be determined according to EN ISO 140-3 and EN ISO 717-1 as appropriate.

5.1.3.2 Acoustic absorption

NOTE Acoustic absorption is a characteristic dependent on an assembled system and not of the product in isolation.

When required, the manufacturer shall declare the sound absorption performance in the end-use condition as tested according to EN ISO 354.

5.1.4 Thermal resistance

When required, the thermal resistance of the assembled system of gypsum binders and gypsum plasters in the end use condition shall be calculated using the equation given in 6.1 of EN ISO 6946:2007.

The design values of thermal conductivity required for this calculation may be used as given Table 2.

For gypsum plasters and gypsum binders where the quantity of aggregates is sufficient to cause a significant deviation from the values given in Table 2, the thermal conductivity shall be determined according to EN 12664.

Table 2 — Design values of thermal conductivity of hardened gypsum binders and gypsum plasters

Density kg/m ³	Thermal conductivity at 23 °C and 50 % of relative humidity
	W/(m·K)
600	0,18
700	0,22
800	0,26
900	0,30
1 000	0,34
1 100	0,39
1 200	0,43
1 300	0,47
1 400	0,51
1 500	0,56

The values given in Table 2 are taken from EN 12524. The reference values concern dry material used inside. When the material is wet, these values shall be adjusted using EN ISO 10456.

5.1.5 Dangerous substances

Materials used in products shall not release any dangerous substances in excess of the maximum permitted levels specified in a relevant European Standard for the material or permitted in the national regulations of the member state of destination.

5.2 Requirements for gypsum binders

Calcium I ulphate content shall be at least 50 %. The properties of gypsum binders shall be determined in accordance with EN 13279-2.

NOTE Other agreements may be defined in a specific contract between producer and user.

5.3 Requirements for gypsum plasters

The properties of gypsum plasters when determined in accordance with EN 13279-2, shall conform to the values given in Table 3.

Gypsum plasters	Gypsum binder content		tting time iin	Flexural strength N/mm ²	Compressive strength N/mm ²	Surface hardness N/mm ²	Adhesive strength N/mm²
	%	manual gypsum plaster	projection gypsum plaster				
B1	≥ 50						
B2	<50						Fracture occurs within the
В3	а						background or the
B4	≥ 50	> 20 ^b	> 50	≥ 1,0	≥ 2,0	_	gypsum plaster, when fracture
B5	<50						occurs in interface
B6	а						gypsum/background the value shall be
В7	≥ 50			≥ 2,0	≥ 6,0	≥ 2,5	≥ 0,1.

Table 3 — Requirements for gypsum plasters

5.4 Requirements for gypsum plasters for special purposes

The properties of gypsum plasters for special purposes when determined in accordance with EN 13279-2, shall conform to the values given in Table 4.

For some manual applications a lower value than 20 min is permitted. In that case the initial setting time shall be declared by the producer

Table 4 — Requirements for gypsum plasters for special purposes

Gypsı	ım plaster	Gypsum binder content %		Finen	ess		Initial s tin m	ne	Flexi stren N/m	gth	Compressive strength N/mm ²	Surface h N/m	
		70	5 000 µm	1 500 µm	200 µm	100 µm	Vicat	Knife	2h ^d	7d ^e		2h ^d	7d ^e
C1	Fibrous plaster works	> 50	0	0	< 1 %	< 10 %	-	> 8	> 1,5	> 3,0	-	> 4,0	> 10
C2	gypsum mortar	> 50	0	-	-	-	> 30	-	-	-	> 2,0	-	-
C3	Acoustic plaster ^a	-	-	-	-	-	> 20 ^f	-	-	-	-	-	-
C4	Thermal insulation plaster ^b	-	-	-	-	-	> 20 ^f	-	-	-	-	-	-
C5	Fire protection plaster ^c	Deviation from nominal content < 10 %	-	-	-	-	> 20 ^f	-	-	-	-	-	-
C6	Thin coat plaster, finishing product	> 50	-	0	-	-	> 20 ^f	-	-	> 1,0	> 2,0	-	-
C7	Finishing product	> 50	-	-	-	0	> 20 ^f	-	-	> 1,0	> 2,0	-	-

a The manufacturer shall verify the acoustic properties by means of suitable methods according to 5.1.3.1 and/or 5.1.3.2.

b The manufacturer shall verify the thermal insulation properties by means of suitable methods according to 5.1.4.

^c The manufacturer shall verify the reaction to fire properties by means of suitable methods according to 5.1.1.

d After conditioning for 2 h after the final setting time under the conditions specified in 3.1 of EN 13279-2:2004.

e After conditioning for 7 d in a humid atmosphere ((20 ± 2) °C and (95 ± 5) % of relative humidity), followed by drying to constant mass at (40 ± 2) °C.

For some manual applications, a lower value than 20 min is permitted. In that case, the initial setting time shall be declared by the producer.

6 Evaluation of conformity

6.1 General

The compliance of products with the requirements of this standard and with the stated values (including classes) shall be demonstrated by:

- Initial Type Testing (ITT);
- Factory Production Control by the producer (FPC).

For the purposes of testing, products may be grouped into families, where it is considered that the selected property is common to all products within that family.

The decision on those products or properties which fall within a family shall be made by the producer.

6.2 Type testing

6.2.1 General

Sampling and testing shall be in accordance with EN 13279-2:2004, clause 3.

The results of all type tests shall be recorded and held by the producer for at least 5 years.

6.2.2 Initial type testing

Initial type testing shall be performed to show conformity with this European Standard.

Initial type testing shall be performed at the beginning of the production of a new products type (unless it is a member of a family previously tested) or at the beginning of a new method of production (where this may significantly affect the stated properties).

Tests previously performed in accordance with the provisions of this standard (same product, same characteristic(s), test method, sampling procedure, system of attestation of conformity, etc.) may be taken into account.

All product characteristics in Clause 5 applicable to the intended uses shall be subject to initial type testing, with the following exceptions:

- release of dangerous substances may be assessed indirectly by controlling the content of the substance concerned;
- when designed values are used;
- when reaction to fire is class A1 (no contribution to fire) without further testing as 5.1.1.

6.2.3 Further type testing

Whenever a change occurs in the products design, the raw material or supplier of the components, or the production process (subject to the definition of a family), which would change significantly one or more of the characteristics, the type tests shall be repeated for the appropriate characteristic(s).

Sampling and testing shall be in accordance with EN 13279-2:2004, 3.2.

The results of all type tests shall be recorded and held by the producer for at least 5 years.

6.3 Factory Production Control (FPC)

6.3.1 General

The producer shall establish, document and maintain an FPC system to ensure that the products placed on the market conform with the stated performance characteristics. The FPC system shall consist of procedures, regular inspections and tests and/or assessments and the use of the results to control raw and other incoming materials or components, equipment, the production process and the product.

An FPC system conforming with the requirements of EN ISO 9001, and made specific to the requirements of this standard, shall be considered to satisfy the above requirements.

The results of inspections, tests or assessments requiring action shall be recorded, as shall any action taken. The action to be taken when control values or criteria are not met shall be recorded and retained for the period specified in the producer's FPC procedures.

6.3.2 Personnel

The responsibility, authority and the relationship between personnel that manages, performs or verifies work affecting product conformity, shall be defined. This applies in particular to personnel that need to initiate actions preventing product non-conformities from occurring, actions in case of non-conformities and to identify and register product conformity problems. Personnel performing work affecting product conformity shall be competent on the basis of appropriate education, training, skills and experience for which records shall be maintained.

6.3.3 Equipment

a) Testing

All weighing, measuring and testing equipment shall be calibrated and regularly inspected according to documented procedures, frequencies and criteria.

b) Manufacturing

All equipment used in the manufacturing process shall be regularly inspected and maintained to ensure use, wear or failure does not cause inconsistency in the manufacturing process. Inspections and maintenance shall be carried out and recorded in accordance with the producer's written procedures and the records retained for the period defined in the producer's FPC procedures.

6.3.4 Raw materials and components

The specifications of all incoming raw materials and components shall be documented, as shall the inspection scheme for ensuring their conformity.

6.3.5 Product testing and evaluation

The producer shall establish procedures to ensure that the stated values of all product characteristics are maintained. Compliance with EN ISO 9001:2000, 7.5.1 and 7.5.2 shall be deemed to satisfy the requirements of this clause.

6.3.6 Traceability and marking

Individual products, product batches or packages shall be identifiable and traceable with regard to their production origin. The producer shall have written procedures ensuring that processes related to affixing traceability codes and/or markings are inspected regularly. Compliance with 7.5.3 of EN ISO 9001:2000 shall be deemed to satisfy the requirements of this clause.

6.3.7 Non-conforming products

The producer shall have written procedures which specify how non-conforming products shall be dealt with. Any such events shall be recorded as they occur and these records shall be kept for the period defined in the producer's written procedures.

6.3.8 Corrective action

The producer shall have documented procedures that instigate action to eliminate the cause of non-conformities in order to prevent recurrence. Compliance with 8.5.2 of EN ISO 9001:2000 shall be deemed to satisfy the requirements of this clause.

6.3.9 Other test methods

For factory production control, test methods other than those specified for ITT may be used providing they provide sufficient confidence in the conformity of the product with this standard.

7 Designation of gypsum binders and gypsum plasters

Gypsum binders and gypsum plasters shall be designated as follows:

- a) type of gypsum binder or gypsum plaster to the designation in Table 1;
- b) reference to this European Standard;
- c) notation as given in Table 1;
- d) initial setting time;
- e) compressive strength.

EXAMPLE OF DESIGNATION

Projection gypsum building plaster (B1) with an initial setting time > 50 min and a compressive strength ≥ 2,0 N/mm²

GYPSUM BUILDING PLASTER

EN 13279-1 - B1/50/2

8 Marking, labelling and packaging

Gypsum binders and gypsum plasters complying with this European Standard shall be clearly marked on the packaging or delivery note or certificate with the following items:

- reference to this European Standard;
- name, trademark or other means of identification of the producer;
- date of production;
- the means of identifying the gypsum binders and gypsum plasters and relating them to their designation as defined in clause 7.

NOTE Where the CE marking also requires the above items, compliance with CE marking would be deemed to satisfy the requirement of this clause.

Annex ZA

(informative)

Clauses of this European Standard addressing essential requirements or other provisions of EU Directives

ZA.1 Scope and relevant characteristics

This European Standard has been prepared under a Mandate M/106 "Gypsum products" given to CEN by the European Commission and European Free Trade Association.

The clauses of this European Standard, shown in Table ZA.1 below, meet the requirements of the Mandate given under EU Construction Products Directive (89/106/EEC).

Compliance with these clauses confers a presumption of fitness of the gypsum binders and gypsum plasters covered by this annex for their intended uses indicated herein; reference shall be made to the information accompanying the CE marking.

WARNING Other requirements and other EU Directives, not affecting the fitness for intended use(s), may be applicable to the gypsum binders and gypsum plasters falling within the scope of this European Standard.

NOTE 1 In addition to any specific clauses relating to dangerous substances contained in this standard, there may be other requirements applicable to the products falling within its scope (e.g. transposed European legislation and national laws, regulations and administrative provisions). In order to meet the provisions of the EU Construction Products Directive, these requirements need also to be complied with, when and where they apply.

NOTE 2 An informative database of European and national provisions on dangerous substances is available at the Construction web site on EUROPA (accessed through http://europa.eu.int/comm/enterprise/construction/internal/dangsub/dangmain.htm).

This annex has the same scope as Clause 1 of this standard with regard to the products covered. It establishes the conditions for the CE marking of gypsum binders and gypsum plasters intended for the use indicated below and shows the relevant clauses applicable (see Table ZA.1).

Table ZA.1 — Scope and requirement clauses relevant for CE marking

Product: Intended use(s):	Gypsum binders and gypsum plasters general building construction (see clause 1)					
Essential characteristics from the Mandate	Requirements Clause in this European Standard:	Mandated level and/or class	Notes			
Reaction to fire (for exposed situations)	5.1.1	A1	A1			
*Direct airborne sound insulation (in end use conditions)	5.1.3.1	-	dB Performance declared is for the system of which the product is a part			
Thermal resistance	5.1.4	-	m ² ·K/W			

^{*} NOTE This characteristic is system dependent and will be provided in producer's literature based upon intended use.

The requirements on a certain characteristic do not apply in those Member States where there are no regulatory requirements on that characteristic for the intended use of the product. In this case, producers placing their products on the market of these Member states are not obliged to determine nor to declare the performance of their products with regard to this characteristic and the option "no performance determined" (NPD) in the information accompanying the CE marking (see ZA.3) may be used.

The NPD option may not be used however where the characteristic is subject to a threshold level.

ZA.2 Attestation and declaration of conformity of gypsum binders and gypsum plasters

The system(s) of attestation of conformity for gypsum binders and gypsum plasters indicated in Table ZA.1 in accordance with the Decision of the Commission 95/467/EC as amended by 01/596/EC and as given in the Annex III of the mandate M/106 "Gypsum products", is shown in Table ZA.2 for the indicated intended uses and relevant level(s) or class(es).

Product(s)			Intended use(s)	Characteristics	AoC system
			In walls, partitions, ceilings or claddings, as relevant intended for fire protection of structural elements	Reaction to fire	3ª
Gypsum plasters	binders,	gypsum	and/or fire compartmentation in buildings	Others	4 ^b
			In walls, partitions, ceilings or claddings, as relevant intended for applications not mentioned above	All	4 ^b
,	a System 3 : see CPD, Annex III.2.(ii), second possibility b System 4 : see CPD, Annex III.2.(ii), third possibility				

The assignation of tasks between the producer and the approved body is shown in Tables ZA.3a and ZA.3b for the indicated intended uses. Where more than one intended use applies for the product, the tables should be read in conjunction.

Table ZA.3a — Assignment of evaluation of conformity tasks for gypsum binders and gypsum plasters intended to be used in walls, partitions, ceilings or claddings for fire protection of structural elements and/or fire compartmentation in buildings: system 3

	Tasks	Content of the task	Clauses of this standard to apply
Tasks for the	Factory production control (FPC)	Reaction to fire. Controlling the content of organic additives/admixtures, if any	
producer	Initial type testing (ITT)	Thermal resistance (if design values are not used)	6
Tasks for the approved body	Initial type testing (ITT)	Reaction to fire	

Table ZA.3b — Assignment of evaluation of conformity tasks for gypsum binders and gypsum plasters intended to be used in walls, partitions, ceilings or claddings for applications not mentioned above: system 4

Tasks Content of the task		Clauses of this standard to apply		
Tasks for the producer	Factory production control (FPC)	Reaction to fire. Controlling the content of organic additives/admixtures, if any	6	
	Initial type testing (ITT)	Thermal resistance (if design values are not used)		

(In case of products under system 3): When compliance with the conditions of this annex is achieved, the producer or his authorised representative established in the EEA, shall prepare and retain a declaration of conformity (EC declaration of conformity) which entitles the producer to affix the CE marking. This declaration shall include:

- name and address of the producer, or his authorised representative established in the EEA;
- description of the product (type, identification, intended use, etc.) and a copy of the information accompanying the CE marking;
- provisions to which the product conforms (i.e. annex ZA of this European Standard);
- particular conditions applicable to the use of the product (e.g. provisions for use under certain conditions);
- name and address of the notified laboratory;
- name of, and position held by, the person empowered to sign the declaration on behalf of the producer or of his authorised representative.

(In case of products under system 4): When compliance with this annex is achieved, the producer or his agent established in the EEA shall prepare and retain a declaration of conformity (EC Declaration of conformity), which entitles the producer to affix the CE marking. This declaration shall include:

- name and address of the producer, or his authorised representative established in the EEA;
- description of the product (type, identification, intended use, etc.) and a copy of the information accompanying the CE marking;
- provisions to which the product conforms (i.e. annex ZA of this European Standard);
- particular conditions applicable to the use of the product (e.g. provisions for use under certain conditions);
- name of, and position held by, the person empowered to sign the declaration on behalf of the producer or of his authorised representative.

The above mentioned declaration shall be presented in the official language or languages of the Member State of the EU in which the product is to be used

ZA.3 CE marking and labelling

The producer or his authorised representative established within the EEA is responsible for the affixing of the CE marking. The CE marking symbol to affix shall be in accordance with Directive 93/68/EC and shall be shown on the product (or when not possible it may be on the accompanying label, the packaging or on the accompanying commercial documents e.g. a delivery note). The following information shall accompany the CE marking symbol:

- name or identifying mark and registered address of the producer;
- the last two digits of the year in which the marking is affixed;
- reference to this European Standard;
- description of the product : generic name, type, quantity and intended use;
- information on those relevant essential characteristics listed in Table ZA.1 which are to be declared:
 - declared values and, where relevant, level or class (including "pass" for pass/fail requirements where necessary) to declare for each essential characteristic as indicated in "Notes" in Table ZA.1;
 - "no performance determined" for characteristics where this is relevant;
 - as an alternative, a standard designation which shows some or all of the relevant characteristics (where the designation covers only some characteristics, it will need to be supplemented with declared values for other characteristics as above).

The "no performance determined" (NPD) option may not be used when the characteristic is subject to a threshold level. Otherwise, the NPD option may be used when and where the characteristic, for a given intended use, is not subject to regulatory requirements in the Member State of destination. The CE conformity marking shall consist of the initials "CE" taking the following form:



- if the CE marking is reduced or enlarged the proportions given in the above graduated drawing must be respected;
- the various components of the CE marking must have substantially the same vertical dimension, which may not be less than 5 mm.

Figure ZA.1 gives an example of the information to be given on the accompanying label, or on the packaging or on the accompanying commercial document.

Content	Explanation	<u>Position</u>
Content		
	CE conformity marking, consisting of the "CE"-symbol given in directive 93/68/EEC.	Product and accompanying document
Producer	Name or identifying mark of the producer	Product and accompanying document
Address	Registered address of the producer	Accompanying document
08	The last two digits of the year in which the marking was affixed	Product and accompanying document
EN 13279-1:2008	No. of this European Standard and version date	Product and accompanying document
Gypsum plaster for internal use B1/50/2	Designation of the gypsum binder and/or gypsum plaster. In accordance with clause 7, initial setting time and compressive strength in accordance with Table 3 or 4	Product and accompanying document
	and information on regulated characteristics	
Reaction to fire : A1	for exposed situations	Product and accompanying document
Direct airborne sound insulation: NPD	in end-use conditions	Accompanying document
Thermal resistance: NPD	in end-use conditions	Accompanying document

Figure ZA.1 — Example of CE marking information

NOTE In addition to any specific information relating to dangerous substances shown above, the product should also be accompanied, when and where required and in the appropriate form, by documentation listing any other legislation on dangerous substances for which compliance is claimed, together with any information required by that legislation. European legislation without national derogations needs not be mentioned.

When marking is carried out as describe above, the full requirements for CE marking are complied with and no further documentation is necessary.

Bibliography

- [1] EN 998-1, Specification for mortar for masonry Part 1: Rendering and plastering mortar
- [2] EN 12524, Building materials and products Hygrothermal properties Tabulated design values
- [3] EN 13914-2, Design, preparation and application of external rendering and internal plastering Part 2: Design considerations and essential principles for internal plastering
- [4] CEN/TR 15124, Design, preparation and application of internal gypsum plastering systems
- [5] Commission Decision 96/603/EC of 4 October 1996 establishing the list of products belonging to Classes A 'No contribution to fire' provided for in Decision 94/611/EC implementing Article 20 of Council Directive 89/106/EEC on construction products (Text with EEA relevance)

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